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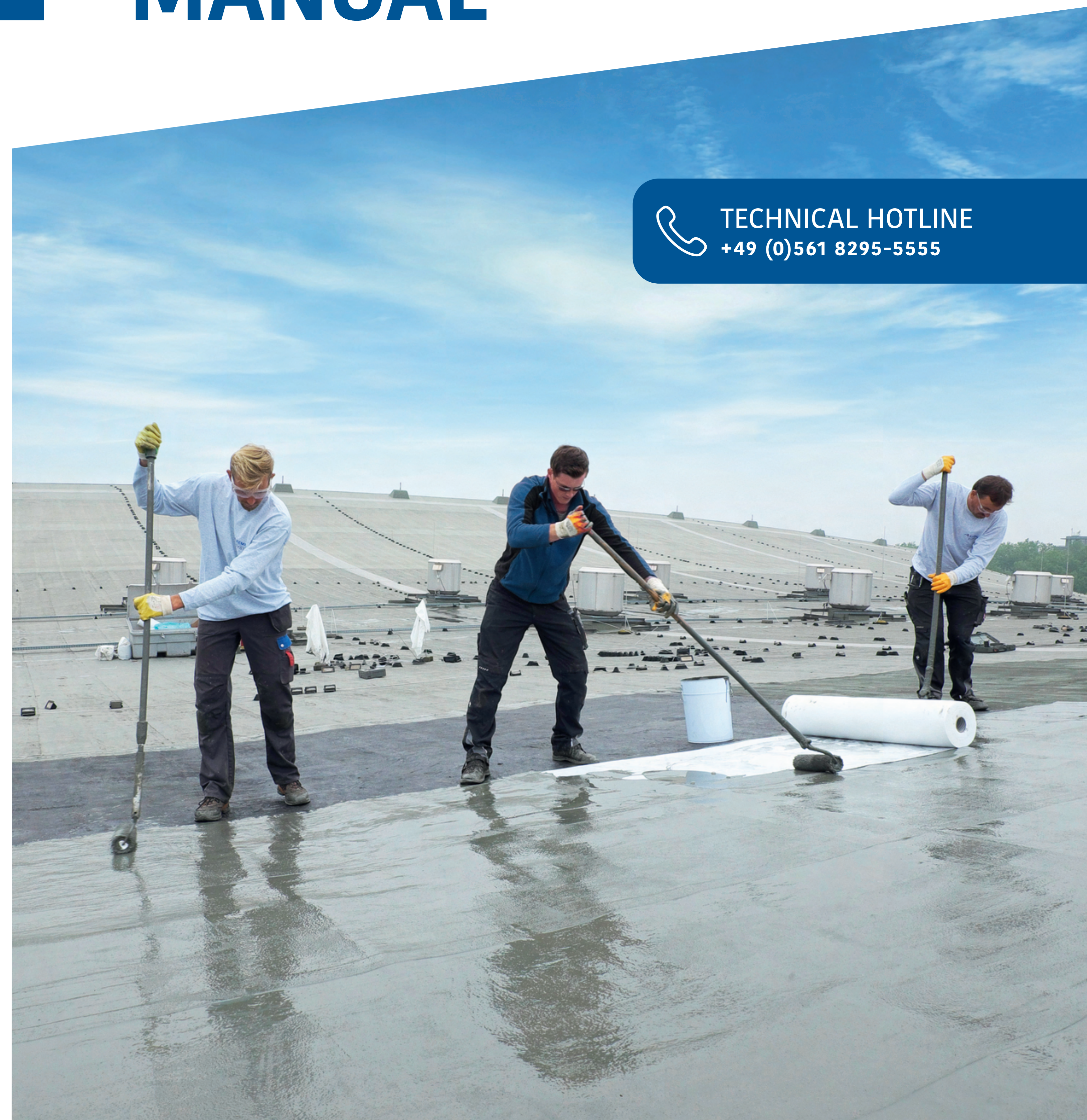
THE PERFECT SOLUTION FOR EVERY WATERPROOFING CHALLENGE

TECHNICAL MANUAL



TECHNICAL HOTLINE
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TECHNICAL MANUAL 1/2024

KEMPEROL

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Product finder

Application areas

Sealing	Flat roof	Balcony	Parking level	Interior	Kitchen	Bathroom / wet rooms
KEMPEROL 1K-PUR	✓	✓	X	X	X	X
KEMPEROL 1K-SF	✓[2]	✓[2]	X	X	X	X
KEMPEROL 2K-PUR	✓	✓	✓	✓	✓	✓
KEMPEROL AC Speed	✓	✓	✓	X	X	X
KEMPEROL AC Speed+	✓[1]	✓[1]	✓[1]	X	X	X
KEMPEROL V 210 M	✓	X	X	X	X	X
KEMPEROL BR M	X	X	✓	X	X	X
KEMPEROL 022	X	X	X	✓	✓	✓
KEMPEROL LF	✓	✓	X	X	X	X
KEMPEROL Roofpatch	✓	X	X	X	X	X
KEMPEROL RepairFix LF	✓	X	X	X	X	X

1 Detail sealing
2 not re-coatable

Combinations of sealings and coatings

	KEMPEROL 1K-PUR	KEMPEROL 2K-PUR	KEMPEROL V 210 M	KEMPEROL BR M	KEMPEROL AC Speed	KEMPEROL 1K-SF	KEMPEROL 022	KEMPERDUR TC coating	KEMPERDUR AC coating
KEMPERDUR Deko	✓	✓	X	X	X	X	Individual test	✓	X
KEMPERDUR Deko transparent	✓	✓	X	X	X	X	Individual test	✓	X
KEMPERDUR Deko 2K	✓	✓	X	X	X	X	Individual test	✓	X
KEMPERDUR HB thick coating	✓	✓	X	X	X	X	Individual test	Individual test	Individual test
KEMPERDUR TC coating	✓	✓	X	X	✓	X	Individual test	✓	Individual test
KEMPERDUR AC coating	X	X	✓	✓	✓	X	Individual test	Individual test	✓

	KEM-PEROL 1K-PUR	KEM-PEROL 2K-PUR	KEM-PEROL V 210 M	KEMPER-OL BR M	KEMPER-OL AC Speed	KEMPER-OL 1K-SF	KEMPER-OL 022	KEMPER-DUR TC coating	KEMPER-DUR AC coating
KEMPER-DUR AC-Finish	✓	✓	✓	✓	✓	X	Individ-ual test	X	✓
KEMPER-DUR EP-Finish	Individ-ual test	✓	Individ-ual test	Individ-ual test	✓	X	Individ-ual test	✓	✓
KEM-CO QB1 Binder	✓[5]	✓[5]	X	X	✓[5]	X	Individ-ual test	Individ-ual test	✓[5]
KEM-PERTEC EP / EP5 Primer[3,4]	✓	✓	✓	✓	Individ-ual test	X	Individ-ual test	Individ-ual test	Individ-ual test
KEM-PERTEC AC Primer[3,4]	✓	✓	✓	✓	✓	X	Individ-ual test	Individ-ual test	✓

3 as bonding bridge
4 as alkali protection
5 Bonding bridge required

✓ = suitable

X = not suitable

Priming recommendation KEMPEROL 2K-PUR waterproofing

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = ●

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEMPERTEC AC Primer	KEMPERTEC AC M-Primer	KEMCO 1K Primer	KEMPERTEC EP5 Primer	KEMPERTEC R Primer	KEMPERTEC FPO Primer / KEMPERTEC TPO Primer	KEMPERTEC Glass Primer	KEMPERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	●	●	–	✓	✓	–	–	✓	✓[4]
Flexible APP bitumen sheeting	●	●	–	●	●	–	–	●	●
Asphalt, weathered	●	●	–	✓	✓	–	–	✓	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	●	●	–	●	●	●	–	●	●
Flexible synthetic sheeting (PVC-P, PVC-EVA)	●	●	–	●	✓[2]	●	–	✓[2]	✓[2.4]
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–
Plastic elements (PVC-U, PVC-C)	●	●	–	●	✓[2]	●	–	✓[2]	✓[2.4]
Plastic elements (HDPE, HDPP, PEHD, PP-H)	●	●	–	●	●	●	–	–	●
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	●	●	–	✓	–	–	–	✓	–
Clinker, bricks, split tiles, face brickwork (grind surface)	●	●	–	✓	–	–	–	✓	–
Concrete, screed, plaster (MG P II/III)	●	●	–	✓	–	–	–	✓	–
Plastic-modified screeds and mortar (PCC)	●	●	–	✓	–	–	–	✓	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	●	●	–	✓	–	–	–	✓	–
Tiling - MEK cleaned	●	●	–	✓	●	–	–	●	●
Glass (non-tempered - uncoated) - MEK cleaned	●	●	–	✓	●	–	✓	–	●
Zinc, galv. steel	●	●	–	✓[2.4]	✓[2]	–	–	✓[2,4]	–
Copper, lead	●	●	–	✓[2]	✓[2]	–	–	✓[2,4]	–
Steel, stainless steels (V2A, V4A), aluminium	●	●	–	✓[2]	✓[2.4]	–	–	✓[2,4]	–

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	•	•	–	✓4.6	✓4,6	–	–	✓4,6	–
closed-cell insulating materials (polyurethane etc.)	•	•	–	✓4,6	✓4,6	–	–	✓4,6	–
wooden boards, plywood, chipboard, OSB	•	•	–	✓4,6	✓4,6	–	–	✓4,6	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL 1K-PUR waterproofing

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	✓[4,8]	✓	✓	–	✓	–	✓	–
Flexible APP bitumen sheeting	–	–	•	•	•	–	–	–	•	–
Asphalt, weathered	–	–	–	✓	✓	–	–	–	✓	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	•	•	•	•	–	–	•	–
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	–	✓[2]	•	✓[2]	•	•	–	✓[2]	–
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	•	✓	•	•	•	–	✓[2]	–
Plastic elements (HDPE, HDPP, PEHD, PP-H)	–	–	–	–	–	•	–	–	–	–
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	–	–	✓[4,8]	✓	–	–	✓	–	✓	–
Clinker, bricks, split tiles, face brickwork (grind surface)	–	–	✓[4,8]	✓	–	–	✓	–	✓	–
Concrete, screed, plaster (MG P II/III)	–	–	✓[4,8]	✓	–	–	✓	–	✓	–
Plastic-modified screeds and mortar (PCC)	–	–	•	✓	–	–	✓	–	✓	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	–	–	•	✓	–	–	✓	–	✓	–
Tiling - MEK cleaned	–	–	–	✓	•	–	•	–	•	–
Glass (non-tempered - uncoated) - MEK cleaned	–	–	–	✓	•	–	•	✓	–	–
Zinc, galv. steel	–	–	✓[2.4]	✓[2.4]	✓[2]	–	•	–	•	–
Copper, lead	–	–	✓[2.4]	✓[2]	✓[2]	–	–	–	•	–
Steel, stainless steels (V2A, V4A), aluminium	–	–	✓[2.4]	✓[2]	✓[2.4]	–	•	–	•	–

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	–	–	–	✓ 4,6	✓ 4,6	–	✓ 4,6	–	✓ 4,6	–
closed-cell insulating materials (polyurethane etc.)	–	–	–	✓ 4,6	✓ 4,6	–	✓ 4,6	–	✓ 4,6	–
wooden boards, plywood, chipboard, OSB	–	–	–	✓ 6	✓ 6	–	✓ 6	–	✓ 4,6	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.
8 Observe the technical data sheet KEMCO 1K Primer and the Technical Information TI23 - Solvent-based products.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL 1K-SF and KEMPEROL 1K-SF + waterproofing

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = •

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Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	–	✓	✓	–	–	–	✓	✓[4,9]
Flexible APP bitumen sheeting	–	–	–	•	•	–	–	–	•	•
Asphalt, weathered	–	–	–	–	–	–	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	–	•	•	–	–	–	•	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	–	•	•	•	–	–	–	✓[2]	•
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	•	–	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	–	•	•	•	–	–	✓[2]	•
Plastic elements (HDPE, HDPP, PEHD, PP-H)	–	–	–	•	•	•	–	–	–	•
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	–	–	–	✓	✓[4]	–	–	–	✓	✓[4]
Clinker, bricks, split tiles, face brickwork (grind surface)	–	–	–	✓	✓[4]	–	–	–	✓	✓[2.4]
Concrete, screed, plaster (MG P II/III)	–	–	–	✓	–	–	✓	–	✓	✓[4.7]
Plastic-modified screeds and mortar (PCC)	–	–	–	✓	–	–	–	–	✓	•
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	–	–	–	✓	•	–	–	–	✓	✓[4]
Tiling - MEK cleaned	–	–	–	•	•	–	–	–	•	✓[2.4]
Glass (non-tempered - uncoated) - MEK cleaned	–	–	–	•	•	–	–	✓	–	✓[2,4]
Zinc, galv. steel	–	–	–	✓[2.4]	✓[2]	–	–	–	•	✓[2.4]
Copper, lead	–	–	–	✓[2]	✓[2]	–	–	–	•	✓[2.4]
Steel, stainless steels (V2A, V4A), aluminium	–	–	–	✓[2]	✓[2.4]	–	–	–	•	✓[2.4]

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	–	–	–	✓4,6	✓4,6	–	–	–	✓4,6	•
closed-cell insulating materials (polyurethane etc.)	–	–	–	✓4,6	✓4,6	–	–	–	✓4,6	•
wooden boards, plywood, chipboard, OSB	–	–	–	✓4,6	✓4,6	–	–	–	✓4,6	✓4.6

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.
7 Only on substrates that are not soaked from the rear.
9 Color changes (bleeding) can occur.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL LF

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = •

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Substrates	KEMPERTEC AC Primer	KEMPERTEC AC M-Primer	KEMCO 1K Primer	KEMPERTEC EP5 Primer	KEMPERTEC R Primer	KEMPERTEC FPO Primer / KEMPERTEC TPO Primer	KEMCO POX 2K Primer	KEMPERTEC Glass Primer	KEMPERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	–	•	–	–	✓	–	✓	✓[4]
Flexible APP bitumen sheeting	–	–	–	•	–	–	•	–	•	•
Asphalt, weathered	–	–	–	•	–	–	•	–	–	•
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	–	•	–	•	•	–	•	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	–	✓[2]	•	–	✓[2]	•	–	✓[2]	✓[2.4]
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	–	•	–	•	•	–	✓[2]	✓[2.4]
Plastic elements (HDPE, HDPP, PEHD, PP-H)	–	–	•	•	–	•	•	–	–	•
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	–	–	–	✓	–	–	✓	–	✓	✓[4]
Clinker, bricks, split tiles, face brickwork (grind surface)	–	–	–	✓	–	–	✓	–	✓	✓[2.4]
Concrete, screed, plaster (MG P II/III)	–	–	–	✓	–	–	✓	–	✓	✓[4.7]
Plastic-modified screeds and mortar (PCC)	–	–	–	✓	–	–	✓	–	✓	✓[4.7]
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	–	–	–	✓	–	–	✓	–	✓	✓[4]
Tiling - MEK cleaned	–	–	–	•	–	–	✓[2]	–	•	✓[2.4]
Glass (non-tempered - uncoated) - MEK cleaned	–	–	–	•	–	–	✓[2]	✓	–	✓[2,4]
Zinc, galv. steel	–	–	–	•	–	–	✓[2]	–	•	✓[2.4]
Copper, lead	–	–	–	✓[2]	–	–	✓[2]	–	•	✓[2,4]
Steel, stainless steels (V2A, V4A), aluminium	–	–	–	•	–	–	✓[2]	–	•	✓[2,4]
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	–	–	–	•	–	–	•	–	✓[4,6]	•

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
closed-cell insulating materials (polyurethane etc.)	–	–	–	✓4,6	–	–	✓	–	✓4,6	•
wooden boards, plywood, chipboard, OSB	–	–	–	✓4,6	–	–	✓6	–	✓4,6	✓4.6

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.
7 Only on substrates that are not soaked from the rear.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL PU Aqua

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = •

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Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	–	–	–	–	✓[9]	–	–	✓[4,9]
Flexible APP bitumen sheeting	–	–	–	–	–	–	•	–	–	•
Asphalt, weathered	–	–	–	–	–	–	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	–	–	–	–	•	–	–	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	–	–	–	–	–	–	–	–	✓[2.4]
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	–	–	–	•	–	–	–	✓[2.4]
Plastic elements (HDPE, HDPP, PEHD, PP-H)	–	–	–	–	–	•	•	–	–	•
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	–	–	–	–	–	–	✓	–	–	–
Clinker, bricks, split tiles, face brickwork (grind surface)	–	–	–	–	–	–	✓[2]	–	–	–
Concrete, screed, plaster (MG P II/III)	–	–	–	–	–	–	✓	–	–	–
Plastic-modified screeds and mortar (PCC)	–	–	–	–	–	–	✓	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	–	–	–	–	–	–	✓	–	–	–
Tiling - MEK cleaned	–	–	–	–	–	–	✓[2]	–	–	–
Glass (non-tempered - uncoated) - MEK cleaned	–	–	–	–	–	–	✓[2]	–	–	–
Zinc, galv. steel	–	–	–	–	–	–	✓[2]	–	–	✓[2.4]
Copper, lead	–	–	–	–	–	–	✓[2]	–	–	✓[2,4]
Steel, stainless steels (V2A, V4A), aluminium	–	–	–	–	–	–	✓[2]	–	–	✓[2,4]
closed-cell insulating materials (polyurethane etc.)	–	–	–	–	–	–	✓	–	–	–

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEMCO POX 2K Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
wooden boards, plywood, chipboard, OSB	–	–	–	–	–	–	✓[6]	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
9 Color changes (bleeding) can occur.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL AC Speed and KEMPEROL AC Speed+ Waterproofing

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = ●

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEMPERTEC AC Primer	KEMPERTEC AC M-Primer	KEMCO 1K Primer	KEMPERTEC EP5 Primer	KEMPERTEC R Primer	KEMPERTEC FPO Primer / KEMPERTEC TPO Primer	KEMPERTEC Glass Primer	KEMPERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	✓	✓	–	–	–	–	–	–	✓[4]
Flexible APP bitumen sheeting	●	●	–	–	–	–	–	–	●
Asphalt, weathered	✓[4]	✓[4]	–	–	–	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	●	●	–	–	–	–	–	–	●
Flexible synthetic sheeting (PVC-P, PVC-EVA)	✓[2]	●	–	–	–	–	–	–	✓[2.4]
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–
Plastic elements (PVC-U, PVC-C)	✓[2]	✓[2]	–	–	–	–	–	–	✓[2.4]
Plastic elements (HDPE, HDPP, PEHD, PP-H)	●	●	–	–	–	●	–	–	–
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	✓	✓	–	–	–	–	–	–	–
Clinker, bricks, split tiles, face brickwork (grind surface)	✓[2]	✓[2]	–	–	–	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	✓	–	–	–	–	–	–	–
Plastic-modified screeds and mortar (PCC)	●	✓	–	–	–	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	✓	✓	–	–	–	–	–	–	–
Tiling - MEK cleaned	●	●	–	–	–	–	–	–	●
Glass (non-tempered - uncoated) - MEK cleaned	●	✓	–	–	–	–	✓	–	●
Zinc, galv. steel	✓[2]	✓[2]	–	–	–	–	–	–	✓[2.4]
Copper, lead	✓[2]	✓[2]	–	–	–	–	–	–	✓[2,4]
Steel, stainless steels (V2A, V4A), aluminium	✓[2]	✓[2]	–	–	–	–	–	–	✓[2,4]

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	✓[6]	✓[6]	–	–	–	–	–	✓[4,6] –	–
closed-cell insulating materials (polyurethane etc.)	✓[6]	✓[6]	–	–	–	–	–	✓[4,6]	•
wooden boards, plywood, chipboard, OSB	✓[6]	✓[6]	–	–	–	–	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPERDUR AC coating

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = ●

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Asphalt, weathered	✓4	✓4	–	–	–	–	–	–	–
Plastic elements (PVC-U, PVC-C)	✓2	✓2	–	–	–	–	–	–	✓2.4
Plastic elements (HDPE, HDPP, PEHD, PP-H)	●	●	–	–	–	●	–	–	–
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	✓	✓	–	–	–	–	–	–	–
Clinker, bricks, split tiles, face brickwork (grind surface)	✓	✓	–	–	–	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	✓	–	–	–	–	–	–	–
Plastic-modified screeds and mortar (PCC)	●	✓	–	–	–	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	✓	✓	–	–	–	–	–	–	–
Tiling - MEK cleaned	●	●	–	–	–	–	–	–	●
Glass (non-tempered - uncoated) - MEK cleaned	●	✓	–	–	–	–	–	–	●
Zinc, galv. steel	✓2	✓2		–	–	–	–	–	✓2.4
Copper, lead	✓2	✓2	–	–	–	–	–	–	✓2,4
Steel, stainless steels (V2A, V4A), aluminium	✓2	✓2	–	–	–	–	–	–	✓2,4
wooden boards, plywood, chipboard, OSB	✓6	✓6	–	–	–	–	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL V 210 M waterproofing

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = ●

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	✓	✓	–	✓	✓	–	–	–	–
Flexible APP bitumen sheeting	●	●	–	●	●	–	–	–	–
Asphalt, weathered	✓[4]	✓[4]	–	✓[4]	✓[4]	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	●	●	–	●	●	–	–	–	–
Flexible synthetic sheeting (PVC-P, PVC-EVA)	✓[2]	●	–	●	✓[2]	–	–	–	–
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–
Plastic elements (PVC-U, PVC-C)	●	✓	–	●	✓[2]	–	–	–	–
Plastic elements (HDPE, HDPP, PEHD, PP-H)	–	●	–	–	–	●	–	–	–
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	✓	✓	–	✓	✓	–	–	–	–
Clinker, bricks, split tiles, face brickwork (grind surface)	–	✓	–	✓	–	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	✓	–	✓	–	–	–	–	–
Plastic-modified screeds and mortar (PCC)	●	●	–	✓	–	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	●	✓	–	✓	●	–	–	–	–
Tiling - MEK cleaned	–	●	–	✓	●	–	–	–	●
Glass (non-tempered - uncoated) - MEK cleaned	–	✓	–	✓	●	–		–	●
Zinc, galv. steel	–	✓	–	✓[2]	✓[2]	–	–	–	–
Copper, lead	–	✓	–	✓[2]	✓[2]	–	–	–	–
Steel, stainless steels (V2A, V4A), aluminium	–	✓	–	✓[2]	✓[2]	–	–	–	✓[2.4]

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	✓[6]	✓[4, 6]	–	✓[4.6]	✓[4,6]	–	–	–	–
closed-cell insulating materials (polyurethane etc.)	✓[4,6]	✓[4, 6]	–	✓[4,6]	✓[4,6]	–	–	–	–
wooden boards, plywood, chipboard, OSB	✓[4,6]	✓[4, 6]	–	✓[4,6]	✓[4,6]	–	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL BR M Waterproofing

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = ●

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	✓	✓	–	✓	✓	–	–	–	–
Flexible APP bitumen sheeting	●	●	–	●	●	–	–	–	–
Asphalt, weathered	✓[4]	✓[4]	–	✓[4]	✓[4]	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	●	●	–	●	●	–	–	–	–
Flexible synthetic sheeting (PVC-P, PVC-EVA)	✓[2]	●	–	●	✓[2]	–	–	–	–
Flexible FPO or TPO synthetic sheeting	–	–	–	–	–	✓[2]	–	–	–
Plastic elements (PVC-U, PVC-C)	●	✓	–	●	✓[2]	–	–	–	–
Plastic elements (HDPE, HDPP, PEHD, PP-H)	–	●	–	–	–	●	–	–	–
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	✓	✓	–	✓	✓	–	–	–	–
Clinker, bricks, split tiles, face brickwork (grind surface)	–	✓	–	✓	–	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	✓	–	✓	–	–	–	–	–
Plastic-modified screeds and mortar (PCC)	●	●	–	✓	–	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	●	✓	–	✓	●	–	–	–	–
Tiling - MEK cleaned	–	●	–	✓	●	–	–	–	●
Glass (non-tempered - uncoated) - MEK cleaned	–	✓	–	✓	●	–		–	●
Zinc, galv. steel	–	✓	–	✓[2]	✓[2]	–	–	–	–
Copper, lead	–	✓	–	✓[2]	✓[2]	–	–	–	–
Steel, stainless steels (V2A, V4A), aluminium	–	✓	–	✓[2]	✓[2]	–	–	–	✓[2.4]

Substrates	KEM-PERTEC AC Primer	KEM-PERTEC AC M-Primer	KEM-CO 1K Primer	KEM-PERTEC EP5 Primer	KEM-PERTEC R Primer	KEM-PERTEC FPO Primer / KEM-PERTEC TPO Primer	KEM-PERTEC Glass Primer	KEM-PERTEC Rapid SF	without priming
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	✓6	✓4, 6	–	✓4.6	✓4,6	–	–	–	–
closed-cell insulating materials (polyurethane etc.)	✓4,6	✓4, 6	–	✓4,6	✓4,6	–	–	–	–
wooden boards, plywood, chipboard, OSB	✓4,6	✓4, 6	–	✓4,6	✓4,6	–	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL 022 waterproofing

State 2023-03-30 suitable = ✓

This table is a guide for the processor and can only be a recommendation. Object-related suitability tests (individual tests) may nevertheless be necessary, since the overall structure must always be taken into account. All substrates must be free from adhesion-reducing substances (grease, release agents, loose talc, etc.). - see also Technical Information TI 21). Primers not listed here can be requested from our technical hotline at 0561/8295-5555.

Substrates	KEMPERTEC TG Primer	Without primer
PE - PP	**Single test**	**Single test**
PVC	–	✓[2]
Panel materials (fiber cement, gypsum and gypsum fiber boards)	–	✓
Gypsum (MG P IV)	✓	–
Plaster mortar (MG P II / III)	✓	–
Clinker, brick, split clinker, exposed masonry (grinding)	–	✓
Concrete, screed	–	✓
Polymer-modified screeds and mortars (PCC)	**Single test**	**Single test**
Stones for building shells (lightweight concrete, sand-lime, concrete, aerated concrete, pumice, etc.)	–	✓
Glass (untempered - uncoated) - MEK cleaned	–	✓[2.4]
Zinc, galvanized steel	–	✓[2]
Copper, lead	–	✓[2]
Steel, stainless steels (V2A, V4A), aluminum	–	✓[2]
open-pored insulation materials (polystyrene, rock wool, foam glass)	**Separating / separating layer**	**Separating / separating layer**
closed-cell insulation materials (polyurethane, etc.)	–	✓[2a,4]
Wooden panels, plywood, chipboard, OSB	–	✓

2 Cleaning with KEMCO MEK cleaning agent and mechanical pre-treatment (only area to be sealed) required.
2a Mechanical pre-treatment (only area to be sealed) required.
4 Covering greater than 15 cm required on this substrate.

When using this primer table, the processing guidelines and technical specifications of the company KEMPER SYSTEM must be strictly observed. Please observe our warranty clause for application engineering consulting.

Priming recommendation KEMPERDUR TC coating

Published: 2024-03-04 suitable = ✓ unsuitable = – Individual test = ●

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEMPERTEC AC Primer	KEMPERTEC AC M-Primer	KEMCO 1K Primer	KEMPERTEC EP5 Primer	KEMPERTEC R Primer	KEMPERTEC FPO Primer / KEMPERTEC TPO Primer	KEMPERTEC Glass Primer	KEMPERTEC Rapid SF	without priming
Asphalt, weathered	–	●	–	✓	✓	–	–	✓	–
Plastic elements (PVC-U, PVC-C)	●	●	–	●	●	●	–	✓[2]	●
Plastic elements (HDPE, HDPP, PEHD, PP-H)	●	●	–	●	●	●	–	–	●
Board materials (fibre cement, gypsum boards and gypsum fibreboards)	●	●	–	✓	–	–	–	✓	–
Clinker, bricks, split tiles, face brickwork (grind surface)	●	●	–	✓	–	–	–	✓	–
Concrete, screed, plaster (MG P II/III)	●	●	–	✓	–	–	–	✓	–
Plastic-modified screeds and mortar (PCC)	–	●	–	✓	–	–	–	✓	–
Bricks and blocks for structural shell (lightweight concrete, sandlime, concrete, Aerated concrete, pumice stone, etc.)	–	●	–	–	–	–	–	✓	–
Tiling - MEK cleaned	–	●	–	–	–	–	–	●	–
Glass (non-tempered - uncoated) - MEK cleaned	–	●	–	–	–	–	–	–	–
Zinc, galv. steel	–	●	–	✓[2]	✓[2]	–	–	✓[2,4]	–
Copper, lead	–	●	–	✓[2]	✓[2]	–	–	✓[2,4]	–
Steel, stainless steels (V2A, V4A), aluminium	–	●	–	✓[2.4]	✓[2]	–	–	✓[2,4]	–
wooden boards, plywood, chipboard, OSB	–	●	–	✓	✓	–	–	✓[4,6]	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

KEMPERTEC EP5 primer

Uses

- As alkaline protection layer
- For new buildings and repair work
- As a primer of the prepared substrate for KEMPEROL waterproofing
- As bonding agent for trowel-applied filler and repair mortar
- For the preparation of a bonding bridges for KEMCO Decor Stone / Natural Stones combined with the KEMCO NQ 0408 Natural Quartz
- As a primer for the KEMPERTEC MA-SF Metal Adhesive

Characteristics

- Solvent-free
- Good adhesion
- Usable at temperatures higher than + 5 °C
- Fast hardening
- Environmentally declared according to valid international standards
- EMICODE EC1 PLUS
- 2-component
- Resin base: Epoxy resin
- Radon-resistant (in combination with KEMPEROL 2K-PUR waterproofing)

Pack sizes

3 * 1.0 kg sachet in plastic container (transparent)

3 * 1.0 kg sachet in plastic container (blue-transparent)

10 kg in metal container (blue-transparent)

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate:

As priming: at least 0.5 kg/m²

As bonding bridge: at least 0.3 kg/m²

As alkali protection: at least 0.4 kg/m²

Properties

Form	Liquid
Standard colour	Comp. A Blue-transparent Comp. B Yellowish
Workability time *	approx. 20 min
Rainproof after *	approx. 3 h
Can be walked on after *	approx. 6 h
Further coating after*	approx. 4 h(in connection areas)

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0025 ETA 03/0026 ETA 03/0043 ETA 03/0044

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Now knead the kneading bag again quickly (about 1 minute) to obtain a homogeneous, streak-free Primer . To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Metal container

KEMPERTEC EP5 primer component B must be mixed into component A using a slow-running mixing device until you achieve a homogeneous and streak-free mixture.

Mixing time approx. 2 min; use within 15 min.

To prevent mixing errors, the mixture should be placed in another container and re-mixed. Prime in at least one work step ensuring that all pores are closed off (a second work step might be necessary). Use a nylon roller for spreading and prevent material build-up.

Use as a primer and bonding coat

Apply Primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz over the entire layer leaving no gaps (consumption approx. 2 kg/m²).

After approx. 4 hours (depending on weather conditions, such as wind, ambient temperature and humidity) and provided that the primed surface is tack-free and dry, further suitable KEMPER SYSTEM products can be applied.

When used as a bonding coat when subsequently coated with KEMCO Decor Stone / Natural Stones

Apply Primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz (consumption approx. 300 g/m²).

After approx. 16 h – when the primed surface is dry and tack-free – KEMCO Decor Stone / Natural Stones can be applied.

Use as a filling compound

Before applying the filling compound, apply KEMPERTEC EP5 primer.

To compensate any irregularities in the horizontal between 2 and 6 mm, the KEMPERTEC EP5 primer is mixed with KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 2 and applied to the prepared and primed substrate.

Use as a repair mortar

Before applying repair mortar, apply KEMPERTEC EP5 primer.

To compensate any unevenness, shrinkage holes and small eruptions up to 20 mm depth, the KEMPERTEC EP5 primer is mixed with the KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 5.

This ratio may be varied depending on the particular application and the ambient conditions.

Use as alkali protection layer

To protect KEMPEROL waterproofing systems against alkaline media (Technical Information TI 15 - Alkalinity) apply a coat of KEMPERTEC EP5 primer (consumption min.0.4 kg/m²).

The still fresh coat must be spread with KEMCO NQ 0712 Natural Quartz a full covering layer (consumption at least 1.5 kg/m²).

The KEMPERTEC EP5 primer may lie without sealing for a maximum of 4 weeks if it has been sanded grain by grain to cover. If the material is left to stand for > 4 weeks, it must be primed again.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 30 - Application of KEMPEROL on vertical surfaces

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RE30

Issued: Vellmar, 2024-03-04

KEMCO POX 2K Primer

Application area

- As a primer for dry and moist ceramic and mineral substrates
- As a primer for stainless steel, aluminium, structural steel and tinplate
- For new buildings and repair work
- Suitable for indoor and outdoor applications
- As filling compound in combination with KEMCO FL Special Filler

Features

- Solvent-free
- 2-component
- Water dilutable
- Permeable to water vapour
- Odourless
- Promotes adhesion
- Can be applied on moist substrates (residual moisture max. 20 %)
- Resin base: Epoxy resin
- EMICODE EC1 PLUS

Pack sizes

7 kg pack

Storage

Store unopened in a cool, frost-free and dry place, see label for use before date.

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Avoid direct sunlight!

Consumption

Depending on the absorbency of the substrate: at least 250 g/m² (if necessary, apply in several working steps).

Properties

Form	Liquid
Standard colour	Silver grey
Workability time*	approx. 45 min.
Rainfproof after*	approx. 4 h
Can be walked on after*	approx. 12 h
Further coating after*	approx. 12 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Mineral substrates must be prepared so that an average adhesive tensile strength of > 1.5 N/mm² and a minimum single value of > 1.0 N/mm² is obtained.

The temperature of the material, ambient air and substrate must be at least +5°C and not above +30°C at a relative air humidity of < 80%.

The product KEMCO POX 2K Primer can also be applied outdoors on slightly moist substrates (max. 20% moisture). A continuous water film must not be present on the surface.

Use as a primer

KEMCO POX 2K Primer component B must be mixed into component A using a slow-running mixing device until you achieve a homogeneous and streak-free mixture. Mixing time approx. 2 minutes.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

For better workability the material can be diluted with 20% water. Then transfer it to a clean container und mix for approx. another 2 minutes.

Use a nylon roller to work the material quickly and generously until all the pores are closed off reliably To prevent the material to react prematurely due to heat build-up in the container, the material should be poured onto the substrate, distributed roughly and then worked in using the roller.

Use as filling and levelling compound

Add KEMCO FL Special Filler to the finished mixture in a ratio of 1:1.5 or 1:3. To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Pour mixture onto the substrate, distribute it evenly with a notched or a smoothing trowel and use a spiked roller to remove any air bubbles if necessary.

Highly absorbent or porous substrates should first be primed with KEMCO POX 2K Primer .

Work interruption and further coating

In case of interruptions of >4 weeks, the surface has to be sanded or activated with KEMCO LE Flexo Primer and primed once more with KEMCO POX 2K Primer .

PPE

Personal protective equipment must be worn.

Clean tools immediately after use with water.

Sufficient ventilation is essential to guarantee full curing. Always adhere to relevant rules and regulations.

For further information on application, please refer to the separate technical data sheets and the application instructions.

GISCODE

RE30

Disposal

Comp. A + B (mixture)	liquid	EAK 08 04 09
Comp. A + B (mixture)	cured	EAK 17 02 03

Important note

Two-component polyurethane, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Issued: Vellmar, 2024-03-04

KEMPERTEC AC Primer

Uses

- As a primer and for a force-fit, permanent bond between substrate and
  - KEMPEROL AC Speed
  - KEMPERDUR AC Park and KEMPERDUR AC Park+
  - KEMPERTEC AC GF Gradient filler and KEMPERTEC AC RM Repair Mortar
  - KEMPEROL V 210 M and KEMPEROL BR M
- As alkaline protection layer
- For new buildings and repair work
- As bonding agent for trowel-applied filler and repair mortar
- Use as primer according to BASt (H PMMA:2018), e.g.: Bridge supporting structure

Characteristics

- Fast hardening
- Solvent-free
- Good adhesion
- Environmentally declared according to valid international standards (EPD)
- 2-component
- Processable down to -5 °C ambient temperature
- Resin base: PMMA

Pack sizes

20 kg (blue-transparent) containers (component A) in combination with KEMPEROL CP catalyst powder (component B), quantity added - see Table

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the absorbency of the substrate:

As priming: at least 0.5 kg/m²

As alkali protection: at least 0.4 kg/m²

Usage must not exceed 0,75 g/m², otherwise bulging and flaking can occur!

Properties

Form	Comp. A liquid
	Comp. B powder
Standard colour	transparent blue
	blue-transparent
	Transparent
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 11 min
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Temperature [°C]	KEMP. CP cat. powder - quantity [20 g bag] for 1 kg	KEMP. CP cat. powder - quantity [100 g bag] for 5 kg	KEMP. CP cat. powder - quantity [100 g bag] for 20 kg	Pot life in container [min]	Surface cured [min]
-5 °C	2 bags	2 bags	8 bags	40 min	60 min
0 °C	2 bags	2 bags	8 bags	30 min	50 min
+5°C	2 bags	2 bags	8 bags	20 min	45 min
+10°C	2 bags	2 bags	8 bags	18 min	30 min
+20°C	1 bag	1 bag	4 bags	15 min	30 min
+30°C	1/2 bag	1/2 bag	2 bags	10 min	15 min

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Do not apply during rising temperatures.

Please refer to the Technical Information TI 33 – Working at temperatures below +5°C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC-Primer may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPERTEC AC-Primer component A.

Use as a primer

The KEMPERTEC AC-Primer must be immediately processed, after mixing with KEMPEROL CP catalyst powder poured on the surface and evenly distributed.Prime evenly in one operation with a nylon roller or a rubber slider until saturation. When using a rubber slider, it is necessary to roll over the surface again with the perlon roller to avoid material accumulation. The next stage can be started after approx. 30 minutes when the primer surface is no longer tacky.

Use as a filling compound

Before applying the filling compound, apply KEMPERTEC AC-Primer .

To compensate any irregularities in the horizontal between 2 and 6 mm, the KEMPERTEC AC-Primer is mixed with KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 3 and applied to the prepared and primed substrate.

Use as a repair mortar

Before applying repair mortar, apply KEMPERTEC AC-Primer .

To compensate any unevenness, shrinkage holes and small eruptions up to 20 mm depth, the KEMPERTEC AC-Primer is mixed with the KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 10. Note that when applying layer thicknesses of more than approx. 2 cm intense heat generation occurs.

This ratio may be varied depending on the particular application and the ambient conditions.

Use as an protective alkaline layer / bonding coat

To protect KEMPEROL waterproofing systems against alkaline media (Technical Information TI 15 - Alkalinity) or to create a bonding coat apply a coat of KEMPERTEC AC Primer (consumption min. 0.4 kg/m²).

The still fresh coat must be spread with KEMCO NQ 0712 Natural Quartz a full covering layer (consumption at least 1.5 kg/m²).

Use as a primer on the bridge support structure

In order to use the primer in a coating system on bridges the instructions for use are binding.

Work interruption and further coating

Operations must be completed within the next 8 days, otherwise separation effects may occur. To avoid this separation effect, it is recommended to sand the still fresh KEMPERTEC AC-Primer with KEMCO NQ 0408 Natural Quartz (approx. 2 kg/m²).Otherwise adhesion of subsequent coats cannot be guaranteed and repriming will be necessary.

PPE

Sufficient ventilation is required. The corresponding instructions should be followed.Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles). We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - Processing of / AC Speed+ Sealing at temperatures below +5°C

Important notes

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

When applying KEMPERTEC AC-Primer explosion protection for working equipment is necessary.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERTEC AC M-Primer

Uses

- As a primer and for a force-fit, permanent bond between substrate and
  - KEMPEROL AC Speed and KEMPEROL AC Speed+ Waterproofing
  - KEMPERDUR AC Park and KEMPERDUR AC Park+
- For new buildings and repair work

Characteristics

- Fast hardening
- Solvent-free
- Good adhesion
- 2-component
- Processable down to -5 °C ambient temperature
- For polymer-modified screeds and mortars (PCC)
- For mineral substrates
- For waterproof concrete
- Resin base: PMMA

Pack sizes

1 kg, 5 kg and 20 kg containers (component A) in combination with KEMPEROL CP catalyst powder (component B), quantity added - see Table

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Consumption

Depending on the absorbency of the substrate:

As priming: at least 0.5 kg/m²

The consumption must not exceed 0.75 kg/m², otherwise it may cause chipping and spalling.

Properties

Form	Comp. A liquid
	Comp. B powder
Standard colour	Transparent
Workability time *	approx. 10 min
(2% KEMPEROL CP catalyst powder)	
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Temperature [°C]	KEMP. CP cat. powder - quantity [20 g bag] for 1 kg	KEMP. CP cat. powder - quantity [100 g bag] for 5 kg	KEMP. CP cat. powder - quantity [100 g bag] for 20 kg	Pot life in container [min]	Surface cured [min]
-5 °C	2 bags	2 bags	8 bags	40 min	60 min
0 °C	2 bags	2 bags	8 bags	30 min	50 min
+5°C	2 bags	2 bags	8 bags	20 min	45 min
+10°C	2 bags	2 bags	8 bags	18 min	30 min
+20°C	1 bag	1 bag	4 bags	15 min	30 min
+30°C	1/2 bag	1/2 bag	2 bags	10 min	15 min

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

(refer to Technical Information TI 21 - Substrate Assessment)

Please refer to the Technical Information TI 33 – Working at temperatures below +5°C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC M-Primer may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Use as a primer

The KEMPERTEC AC M-Primer must be poured onto the surface immediately after mixing with KEMPEROL CP catalyst powder and distributed evenly. Prime the surface in just one application using a nylon roller, ensuring all pores are closed off. Use a nylon roller for spreading and prevent material build-up. The next stage can be started after approx. 30 minutes when the primer surface is no longer tacky.

Work interruption and further coating

Operations must be completed within the next 8 days, otherwise separation effects may occur. To avoid this separation effect, it is recommended to sand the still fresh KEMPERTEC AC M-Primer with KEMCO NQ 0408 Natural Quartz (approx. 2 kg/m²).Otherwise adhesion of subsequent coats cannot be guaranteed and repriming will be necessary.

PPE

Sufficient ventilation is required. The corresponding instructions should be followed.Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles). We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - Processing of / AC Speed+ Sealing at temperatures below +5°C

Important notes

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

When applying KEMPERTEC AC M-Primer explosion protection for working equipment is necessary.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA15

Issued: Vellmar, 2024-03-04

KEMPERTEC R Primer

Uses

- For new buildings and repair work
- For priming the substrate prepared for KEMPEROL waterproofing systems

Characteristics

- Solvent-free
- Good adhesion
- Wide range of applications
- Fast hardening
- 2-component
- Resin base: Polyurethane resin

Pack sizes

2 * 1,0 kg sachets in a plastic bucket

CE marking

Component to	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: at least 0,5 kg/m²

Properties

Form	Liquid
Standard colour	Comp. A
	Cream
	Comp. B
	Dark brown
Workability time *	approx. 8 min
Rainproof after *	approx. 2 h
Can be walked on after *	approx. 2-3 h
Further coating after*	approx. 2-3 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Now knead the kneading bag again quickly (about 1 minute) to obtain a homogeneous, streak-free Primer . To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Priming in at least one work step until pore closure is achieved. Distribute with the Perlon roller in such a way that material build-up is avoided.

Work interruption and further coating

After approx. 2 - 3 hours (depending on weather conditions such as wind, humidity and temperature), when the surface of the applied primer is dry and tack-free, further suitable KEMPER SYSTEM products can be applied.

Separating effects

The subsequent coating should be applied no later than 8 days after the KEMPERTEC R Primer has been applied to the substrate. Otherwise, a separation effect will occur. To avoid this separating effect, we rec-

ommend sanding the still fresh KEMPERTEC R Primer with KEMCO NQ 0408 Natural Quartz (min. 2 kg/m²) to cover the entire surface.

Otherwise adhesion of subsequent coats cannot be guaranteed and repriming will be necessary.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please observe Technical Information TI 21.

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU40

Issued: Vellmar, 2024-03-04

KEMPERTEC Rapid SF Primer

Uses

- For new buildings and repair work
- As bonding agent for trowel-applied filler and repair mortar
- As a primer on balconies and terraces with substrates such as concrete, screed, metal, wood, bitumen and plastic membranes
- Universally applicable in the connection area and in the area
- As a primer of the prepared substrate for KEMPEROL waterproofings

Characteristics

- Solvent-free
- Good adhesion
- 2-component
- Resin base: Polyaspartic
- Alkali-resistant
- Usable at temperatures higher than +5 °C
- Fast hardening even at low temperatures

Consumption

Depending on the nature of the substrate: at least 0.5 kg/m².

Pack sizes

2 * 1 kg kneading bags in plastic bucket

2 * 2.5 kg kneading bags in plastic bucket

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
Standard colour	Transparent
Workability time *	approx. 10 min
Rainproof after *	approx. 60 min
Can be walked on after *	approx. 90 min
Further coating after*	approx. 60 min (in connection areas)

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Now knead the kneading bag again quickly (about 1 minute) to obtain a homogeneous, streak-free Primer . To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Prime in at least one work step ensuring saturation. Use a nylon roller for spreading to prevent material build-up.

Work interruption and further coating

After approx. 60 - 90 minutes (depending on weather conditions such as wind, humidity and temperature), when the surface of the applied primer is dry and tack-free, further suitable KEMPER SYSTEM products can be applied.

Separating effects

The subsequent coating should be applied no later than 72 hours after the KEMPERTEC Rapid SF - Primer has been applied to the substrate. Otherwise, a separation effect will occur. In order to avoid this separating effect when further coating is carried out after

more than 72 hours, it is recommended that the still fresh KEMPERTEC Rapid SF - Primer be scattered withKEMCO NQ 0408 Natural Quartz(min. 2 kg/m²) to cover the entire surface.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

GISCODE

PU10

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Important notes

The BG-Chemie data sheets must be observed during processing.

Issued: Vellmar, 2024-03-04

KEMCO 1K Primer

Application area

- For priming the substrate prepared for KEMPEROL Waterproofing Systems
- For new buildings and repair work
- To produce a bonding coat for KEMCO Decor Stone / Natural Stones in combination with KEMCO NQ 0408 Natural Quartz

Features

- Promotes adhesion
- 1 part (single component)
- Fast evaporating
- Basis: Isocyanate prepolymers, dissolved in organic solvents

Pack sizes

1 kg and 4 kg

Storage

Store unopened in a cool, frost-free and dry place, see label for use before date.

Consumption

Depending on the absorbency of the substrate: at least 0,15 kg/m².

Properties

Form	Liquid
Colour	transparent yellowish
Workability time*	approx. 20 min
Rainfproof after*	approx. 1 h
Can be walked on after*	approx. 1 h
Further coating after*	approx. 1 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

(refer to Technical Information TI 21 - Substrate Assessment.)

Please make sure to respect the priming recommendations.

Caution: The product KEMCO 1K Primer is not suitable for every substrate.

During application, the surface temperature must be 3K above the dew point. If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab. 1).

Application

Prime in one work step ensuring that all pores are closed off. Distribute using a nylon roller to avoid material build-up, as the substrate will otherwise be damaged.

When used as a bonding coat

Apply the primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz over the entire layer leaving no gaps (consumption approx. 2 kg/m²).

Further suitable KEMPER SYSTEM products can be applied after approx. 4 hours when the primed surface is dry and tack-free.

Work interruption and further coating

After 1 hour (depending on weather conditions such as wind, humidity and temperature), when the surface of the applied primer is dry and tack-free, further suitable KEMPER SYSTEM products can be applied. This must be completed within the next 48 hours, otherwise separation effects may occur. To avoid this separating effect, we recommend sanding the still fresh KEMCO 1K primer with KEMCO NQ 0408 Natural Quartz (approx. 2 kg/m²). Otherwise, re-priming is required after 48 hours.

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please note the following technical information:

- TI 21 – Substrate Assessment
- TI 23 – Solvent-based products

Bituminous substrates easily start to disolve, therefore material build-up (puddles) must be avoided!

Disposal

Liquid	EAK 08 05 01
cured	EAK 17 02 03

Important note

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

Do not allow to enter waters, waste water or soil.

Not suitable for use in swimming pools!

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPERTEC FPO Primer

Uses

- For new buildings and repair work
- Optimum adhesion between polyolefinic plastics (FPO/TPO) and KEMPEROL waterproofing systems

Characteristics

- Good adhesionon FPO sheets
- 1-component
- Quickly flashes off

Pack sizes

0,75 kg and 4 kg units

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on substrate and temperature: min. 50 g/m². At higher temperatures, make allowances for a higher level of consumption.

Properties

Form	Liquid
Standard colour	Transparent
Workability time *	approx. 5 min
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

A cleaning with KEMCO MEK Cleaning Agent is necessary!

Warning: KEMPERTEC FPO Primer is not appropriate for every substrate!

This primer is especially developed for polyolefin plastics!

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC FPO Primer to be applied evenly, in a thin layer over the whole area of the substrate, using a clean cloth. Exchange cloths for new ones several times and ensure that the complete surface is treated.

Work interruption and further coating

After 15 - 30 minutes (depending on weather conditions such as wind, humidity and temperature), when the surface of the applied primer is dry and tack-free, further suitable KEMPER SYSTEM products can be applied (KEMPEROL 2K-PUR waterproofing, KEMPEROL 1K-PUR waterproofing, KEMPEROL AC Speed and KEMPEROL AC Speed+). This further coating must be completed within the next 24 hours, otherwise separation effects may occur.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 23 - solvent-based products

Important notes

Individual tests regarding the adhesive tensile strength values on other flexible synthetic sheeting (EPDM, PIB, etc.) are available. Thus, the FPO Primer should only be applied to these kinds of sheeting after consulting KEMPER SYSTEM!

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERTEC TPO-Primer

Uses

- For new buildings and repair work
- Optimum adhesion between polyolefinic plastics (FPO/TPO) and KEMPEROL waterproofing systems
- As a primer on FPO or TPO plastic sheets for the waterproofings KEMPEROL 2K-PUR, KEMPEROL 1K-PUR, KEMPEROL 1K-SF and KEMPEROL LF

Characteristics

- Good adhesion
- 1-component
- Quickly flashes off

Pack sizes

0.75 kg and 4 kg container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on substrate and temperature: min. 50 g/m². At higher temperatures, make allowances for a higher level of consumption.

Properties

Form	Liquid
Standard colour	Transparent
Workability time *	approx. 5 min
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

A cleaning with KEMCO MEK Cleaning Agent is necessary!

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Application

KEMPERTEC TPO-Primer to be applied evenly, in a thin layer over the whole area of the substrate, using a clean cloth. Exchange cloths for new ones several times and ensure that the complete surface is treated.

Work interruption and further coating

After 15 - 30 minutes (depending on weather conditions such as wind, humidity and temperature), when the surface of the applied primer is dry and tack-free, further suitable KEMPER SYSTEM products can be applied (KEMPEROL 2K-PUR waterproofing, KEMPEROL 1K-PUR waterproofing, KEMPEROL 1K-SF and KEMPEROL LF). This further coating must be completed within the next 24 hours, otherwise separation effects may occur.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERTEC TG Primer

Uses

- For new buildings and repair work
- As a primer of the prepared substrate for KEMPEROL 022
- Primer for mineral substrates such as
  - gypsum
  - lime and lime-cement plaster
  - cement plaster
- As a primer for the KEMPERTEC MA-SF Metal Adhesive

Characteristics

- Good adhesion
- Pronounced depth effect
- Consolidation of sanding, chalking and porous substrates
- Reduces the absorbency
- Acrylate dispersion

Pack sizes

10 l tin

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

The consumption of KEMPERTEC TG Primer depends on the substrate properties and is at least 100 ml/m² for a single primer coat.

Properties

Form	Liquid
Standard colour	Milky
Further coating after*	approx. 1-2 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC TG-Primer can be used straight from the can using a brush or a suitable airless spray diffuser. Avoid ponding of the primer on the substrate. For extremely absorbing substrates we recommend to apply two primer coats, wet-in-wet. This primer cannot be used for plastic, metal or wooden substrates.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools wit water immediately after use.

Note

Please observe Technical Information TI 21.

Important notes

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

M-GF01

Issued: Vellmar, 2024-03-04

KEMPERTEC Glass Primer

Uses

- For new buildings and repair work
- Optimal adhesion between glass and the subsequent waterproofings:
  - KEMPEROL 2K-PUR
  - KEMPEROL 1K-PUR
  - KEMPEROL AC Speed
  - KEMPEROL 1K-SF
  - KEMPEROL V 210 M
  - KEMPEROL LF

Characteristics

- Good adhesion on glass
- 1-component
- Ready-to-use
- Resin base: Polyisocyanate

Pack size

250 ml bottle

Shelf Life

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Usage guide

Depending on the nature of the substrate : min. 30 g/m²

Properties

Form	Liquid
Colour	black
Workability time*	approx. 2 min.
Cured after*	approx. 15 min.
Further coating after *	approx. 30 min.

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Any coarse soiling on the surface must be removed beforehand. After that, the surface must then be cleaned with KEMCO MEK Cleaning Agent.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

Shake the KEMPERTEC Glass Primer bottle vigorously for at least 1 minute before you open it, in order to resolve possible deposits in the KEMPERTEC Glass Primer.

Apply KEMPERTEC Glass Primer in one work step, covering the entire surface. Distribute the primer using a brush so as to avoid material build-up.

Work interruption and further coating

After 15 - 30 minutes (depending on weather conditions such as wind, humidity and temperature), when the surface of the applied primer is dry and tack-free, further suitable KEMPER SYSTEM products can be applied (KEMPEROL 2K-PUR waterproofing, KEMPEROL 1K-PUR waterproofing, KEMPEROL AC Speed , KEMPEROL V 210 M , KEMPEROL 1K-SF and KEMPEROL LF). This further coating must be completed within the next 24 hours, otherwise separation effects may occur.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please observe Technical Information TI 21.

Important information

The KEMPERTEC Glass Primer is extremely sensitive to moisture.The bottle has to be closed immediately after use in order to extend the shelf life of the KEMPERTEC Glass Primer.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPEROL 2K-PUR waterproofing

Uses

- As surface waterproofing, for creating connections and details in combination with KEMPEROL non-woven fabric
- As a waterproofing system under tarmac layers
- Suitable for indoor and outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Odor-neutral
- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- UV-resistant
- Environmentally declared according to valid international standards (EPD)
- DGNB Navigator Label
- EMICODE EC1
- 2-component
- CE marking
- Red algae resistant
- Resin base: Polyurethane resin
- Radon-resistant (in combination with KEMPERTEC EP5 primer)

Pack size

10 * 1 kg sachets in a box

2 * 2,5 kg sachets in a plastic bucket

12,5 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

depending on the nature of the substrate: at least 3,0 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Properties

Form	Liquid
Standard colour	Yellow-grey
	Anthracite
Special colours	On request
Workability time*	approx. 30 min
Rainproof after*	approx. 2 h
Can be walked on after*	approx. 16 h
Cured after*	approx. 72 h**
Further coating after*	approx. 16 h ****
with mastic asphalt after	approx. 16 h
Short term temperature resistance	250 °C

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with KEMPERDUR Surfacings, see corresponding Technical Data Sheet.

CE marking

Component to	ETA 03/0044
Water vapor diffusion resistance coefficient	μ ≈ 3100
Resistance to wind loads	>= 50 kPa
External fire performance	B_{ROOF}(t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

For some substrates, priming of the surface may not be necessary. Generally, the priming recommendations for KEMPEROL 2K-PUR Waterproofing have to be observed.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Now knead the kneading bag again quickly (about 1 minute) to obtain a homogeneous, streak-free Waterproofing .

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

At temperatures below 10 °C, the KEMPEROL 2K-PUR Speedshot must be added and stirred.

Plastic container

KEMPEROL 2K-PUR Waterproofing component A must be stirred thoroughly. At temperatures below10 °C, the the component A of the KEMPEROL 2K-PUR Speedshot for KEMPEROL 2K-PUR Waterproofing must be added and stirred. Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Use

Apply approx. 2/3 of KEMPEROL 2K-PUR Waterproofing, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 2K-PUR Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing is only conditionally resistant to alkalis. Therefore, if long-term exposure is expected KEMPERTEC EP5 primer or KEMPERTEC AC Primer applied to the waterproofing and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15- Alkalinity).

Work interruption and further coating

The time it takes for further coating is shortened by the addition of KEMPEROL 2K-PUR Speedshot. Standing time greater than 14 days: Sanding the existing work area with sandpaper (P80 - P100).

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU40

Issued: Vellmar, 2024-03-04

KEMPEROL 2K-PUR Speedshot

Uses

- To accelerate the reaction of KEMPEROL 2K-PUR waterproofing

Characteristics

- Shortens the setting process of KEMPEROL 2K-PUR waterproofing

Pack sizes

0,9 kg in a plastic bottle with a measuring chamber

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

The data refer to a quantity of 1 kg KEMPEROL 2K-PUR waterproofing

Temperature*** [°C]		10 ml	20 ml	30 ml
5°C	V*	21 min	15 min	12 min
	W**	6.5 h	5.5 h	5 h
10°C	V*	20 min	12 min	9 min
	W**	5.5 h	4.5 h	3.5 h
15°C	V*	16 min	10 min	7 min
	W**	5 h	3.5 h	3 h
20°C	V*	11 min	7 min	5 min
	W**	3.5 h	2.5 h	2 h
25°C	V*	10 min	6 min	-
	W**	3 h	2 h	-
30°C	V*	7 min	-	-
	W**	2 h	-	-

* Working time
** Further coating after
*** Temperature of KEMPEROL 2K-PUR Sealing

The data refer to a quantity of 2.5 kg KEMPEROL 2K-PUR waterproofing

Temperature*** [°C]		1 Shot (25 ml)	2 Shot (50 ml)	3 Shot (75 ml)
5°C	V*	21 min	15 min	12 min
	W**	6.5 h	5.5 h	5 h
10°C	V*	20 min	12 min	9 min
	W**	5.5 h	4.5 h	3.5 h
15°C	V*	16 min	10 min	7 min
	W**	5 h	3.5 h	3 h
20°C	V*	11 min	7 min	5 min
	W**	3.5 h	2.5 h	2 h
25°C	V*	10 min	6 min	-
	W**	3 h	2 h	-
30°C	V*	7 min	-	-
	W**	2 h	-	-

* Working time
** Further coating after
*** Temperature of KEMPEROL 2K-PUR waterproofing

The data refer to a quantity of 12.5 kg KEMPEROL 2K-PUR Sealing

Temperature*** [°C]		1 Shot (25 ml)	2 Shot (50 ml)	3 Shot (75 ml)
5°C	V*	-	-	22 min
	W**	-	-	4.5 h
10°C	V*	-	-	22 min
	W**	-	-	4.5 h
20°C	V*	20 min	18 min	-
	W**	7 h	6 h	-

* Working time
** Further coating after
*** Temperature of KEMPEROL 2K-PUR waterproofing

Properties

Form	Liquid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparation

To add the correct dosage of KEMPEROL 2K-PUR Speedshot first screw the blue cap to the measuring chamber of the bottle. Then squeeze the bottle repeatedly until the dosage chamber has filled up to the 25ml line. 25 ml is one shot.

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

Sachet

KEMPEROL 2K-PUR waterproofing mix in the kneading bag according to instructions, and then transfer. KEMPEROL 2K-PUR Speedshot mix with stirring rod or slow-running stirrer, streak-free into the finished waterproofing KEMPEROL 2K-PUR. Mixing time approx. 1 minute.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL 1K-PUR waterproofing

Uses

- As surface waterproofing, for creating connections and details in combination with KEMPEROL non-woven fabric
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- UV-resistant
- Environmentally declared according to valid international standards
- 1-component
- CE marking
- Red algae resistant
- Resin base: Polyurethane resin

Pack sizes

7 kg and 15 kg container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

depending on the nature of the substrate: at least 3,4 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Properties

Form	Liquid
Standard colour	Pale grey
Special colours	On request
Workability time*	approx. 30 min
Rainproof after*	approx. 60 min
Can be walked on after*	approx. 24 h
Cured after*	approx. 2–3 d**
Further coating after*	approx. 3/7 d (siehe Verarbeitung) ****

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with KEMPERDUR Surfacings, see corresponding Technical Data Sheet.

CE marking

Component to	ETA 03/0043
Water vapor diffusion resistance coefficient	μ ≈2300
Resistance to wind loads	>= 50 kPa
External fire performance	B_{ROOF}(t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

Prior to the application of the KEMPEROL 1K-PUR Waterproofing , prime with KEMPERTEC Primer according to the primer recommendation.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

At temperatures below +10°C it is recommended to add KEMCO 1K Thinner.

Mixing

Open the container and stir the material thoroughly and carefully.

Use

Apply approx. 2/3 of KEMPEROL 1K-PUR Waterproofing , roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 1K-PUR Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing is only conditionally resistant to alkalis. Therefore, if long-term exposure is expected KEMPERTEC EP5 primer or KEMPERTEC AC Primer applied to the waterproofing and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15- Alkalinity).

Work interruption and further coating

The is KEMPEROL 1K-PUR Waterproofing after 3 days with KEMPERDUR Deko or KEMCO 1K Primer incl. KEMCO NQ 0712 Natural Quartz as bonding bridge under KEMCO Decor Stone / Natural Stones can be further coated as a bonding bridge, with other suitable KEMPER SYSTEM products after 7 days.

Standing time greater than 3 to 14 days: Cleaning the work area with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPEROL 1K-SF waterproofing

Uses

- As surface waterproofing, for creating connections and details in combination with KEMPEROL non-woven fabric
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- Low-odor
- UV-resistant
- Environmentally declared according to valid international standards (EPD)
- EMICODE EC1 PLUS
- 1-component
- CE marking
- Red algae resistant
- On the basis of polyurethane
- Insensitive to humidity
- Alkali-resistant
- For indoor use

Pack sizes

6,5 kg, 14 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 3,0 kg/m²

Properties

Form	Liquid
Standard colour	Anthracite
	Light grey
Workability time*	approx. 30 min
Rainproof after*	approx. 1 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 1-2 d
Further coating after*	approx. /

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 13/0656
Water vapor diffusion resistance coefficient	μ ≈ 2100
Resistance to wind loads	>= 50 kPa for tear-resistant substrates
External fire performance	$B_{ROOF}(t1)$ **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

For some substrates, e.g. concrete and screed surfaces, a primer may not be necessary depending on the load. In the case of concrete and screed surfaces, care must be taken to ensure that there is no moisture penetration from the rear of the substrate. Generally, the priming recommendations for KEMPEROL 1K-SF Waterproofing have to be observed.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Due to the moisture tolerance of the material, KEMPEROL 1K-SF it can be processed on matt damp substrates. However, the surface must be free of standing water.

Mixing

Open the container and stir the material thoroughly and carefully.

Use

Apply approx. 2/3 of KEMPEROL 1K-SF Waterproofing, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 1K-SF Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

When using the 6.5 kg container indoors, the limit value for methanol is complied with in cross-ventilated work areas.

Work interruption and further coating

In case of interruption of work can be connected directly to the KEMPEROL 1K-SF Waterproofing within 24 hours. Standing time greater than one day: Thorough machine sanding of the existing work area with sandpaper (P80 - P100).

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

GISCODE

RSP20

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Please allow for proper ventilation during and after application/curing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL 1K-SF + Waterproofing

Uses

- As seal in conjunction with KEMPEROL 165 fleece for making connections
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- Low-odor
- UV-resistant
- 1-component
- Red algae resistant
- On the basis of polyurethane
- Insensitive to humidity
- Alkali-resistant
- For indoor use

Pack sizes

6,5 kg, 14 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 3,0 kg/m²

Properties

Form	Liquid
Standard colour	Anthracite
	Light grey
Workability time*	approx. 30 min
Rainproof after*	approx. 1 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 1-2 d
Further coating after*	approx. /

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 13/0656
Water vapor diffusion resistance coefficient	μ ≈ 2100
Resistance to wind loads	>= 50 kPa
External fire performance	$B_{ROOF}(t1)$ **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

For some substrates, e.g. concrete and screed surfaces, a primer may not be necessary depending on the load. In the case of concrete and screed surfaces, care must be taken to ensure that there is no moisture penetration from the rear of the substrate. Generally, the priming recommendations for KEMPEROL 1K-SF + Waterproofing have to be observed.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Due to the humidity tolerance of the material KEMPEROL 1K-SF + Waterproofing can be applied to slightly damp substrates. However, the surface must be free of standing water.

Mixing

Open the container and stir the material thoroughly and carefully.

Use

Apply approx. 2/3 of KEMPEROL 1K-SF + Waterproofing, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 1K-SF + Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

When using the 6.5 kg container indoors, the limit value for methanol is complied with in cross-ventilated work areas.

Work interruption and further coating

In case of interruption of work can be connected directly to the KEMPEROL 1K-SF + Waterproofing within 24 hours. Standing time greater than one day: Thorough machine sanding of the existing work area with sandpaper (P80 - P100).

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

GISCODE

RSP20

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Please allow for proper ventilation during and after application/curing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL AC Speed

Uses

- As surface waterproofing, for creating connections and details in combination with KEMPEROL non-woven fabric
- As a waterproofing system under tarmac layers
- Suitable for outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate
- For OS10 systems

Characteristics

- Fast hardening
- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- UV-resistant
- Environmentally declared according to valid international standards (EPD)
- 2-component
- Lightfast
- Processable down to -5 °C ambient temperature
- CE marking
- Red algae resistant
- Resin base: PMMA
- Alkali-resistant
- Radon-resistant

Pack sizes

15 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B) Quantity added -see Table Hardening

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

depending on the nature of the substrate: at least 2,5 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Properties

Form	Comp. A liquid
	Comp. B powder
Standard colour	Traffic grey
Workability time* (2% KEMPEROL CP catalyst powder)	approx. 20 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. see the Hardening table**
Further coating after*	approx. 60 min ***
Short term temperature resistance	250 °C

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with KEMPERDUR Surfacings, see corresponding Technical Data Sheet.

CE marking

	ETA 12/0416
Water vapor diffusion resistance coefficient	μ ≈6600
Resistance to wind loads	1,6 N/mm²
External fire performance	$B_{ROOF}(t1)$ **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 15 kg KEMPEROL AC Speed waterproofing			
Temperature [°C]	KEMPEROL CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
-5°C	600	60 min	90 min
0°C	600	45 min	80 min
+5°C	600	35 min	70 min
+10°C	600	30 min	60 min
+20°C	300	20 min	35 min
+30°C	150	20 min	30 min

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

For some substrates, priming of the surface may not be necessary. Generally, the priming recommendations for KEMPEROL AC Speed waterproofing have to be observed.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Preparation

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

At temperatures above +25°C, protect the material against direct sunlight.

Mixing

KEMPEROL AC Speed waterproofing may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPEROL AC Speed waterproofing component A.

Use

The Waterproofing is produced by mixing KEMPEROL CP catalyst powder and KEMPEROL AC Speed waterproofing and KEMPEROL 165 fleece. Please refer to the instructions for use for further information.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

Work interruption and further coating

If the surface of the sealant is tack-free, it can be applied after approx. 60 minutes KEMPERDUR AC coating, KEMPERDUR AC Park, KEMPERDUR AC Park+ or KEMPERDUR AC-Finish .

During the further processing of KEMPERDUR MT mineral tile adhesive a bonding bridge is required.

PMMA surfaces must be cleaned with KEMCO MEK Cleaning Agent if left open for more than 3 days.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - Processing of / AC Speed+ Sealing at temperatures below +5°C
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

When applying KEMPEROL AC Speed waterproofing explosion protection for working equipment is necessary.

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPEROL AC Speed+ Waterproofing

Uses

- As seal in conjunction with KEMPEROL 165 fleece for making connections
- Suitable for outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Fast hardening
- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- UV-resistant
- Environmentally declared according to valid international standards (EPD)
- 2-component
- Lightfast
- Processable down to -5 °C ambient temperature
- CE marking
- Red algae resistant
- Resin base: PMMA
- Alkali-resistant

Usage guide

depending on the nature of the substrate: at least 2,5 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Pack sizes

10 kg container (component A) in combination with KEMPEROL CP catalyst powder (component B), refer to the Curing Table for recommended quantities.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Comp. A liquid
	Comp. B powder
Standard colour	Traffic grey
	Anthracite
Workability time*	approx. 15 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. see the Hardening table**
Further coating after*	approx. 60 min ***

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with KEMPERDUR Surfacings, see corresponding Technical Data Sheet.

CE marking

	ETA 12/0416
Water vapor diffusion resistance coefficient	μ ≈6600
Resistance to wind loads	1,6 N/mm²
External fire performance	B_{ROOF}(t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg KEMPEROL AC Speed+ waterproofing			
Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
-5°C	400	60 min	90 min
0°C	400	45 min	80 min
+5°C	400	35 min	70 min
+10°C	400	30 min	60 min
+20°C	200	20 min	35 min
+30°C	100	20 min	30 min

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

For some substrates, priming may not be necessary. In general, the primer recommendation of KEMPEROL AC Speed must be taken into account.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Preparation

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

At temperatures above +25°C, protect the material against direct sunlight.

Mixing

KEMPEROL AC Speed+ waterproofing may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPEROL AC Speed+ waterproofing component A.

Use

The Waterproofing is produced by mixing KEMPEROL CP catalyst powder and KEMPEROL AC Speed+ waterproofing and KEMPEROL 165 fleece.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

During the further processing of KEMPERDUR MT mineral tile adhesive a bonding bridge is required.

PMMA surfaces must be cleaned with KEMCO MEK Cleaning Agent if left open for more than 3 days.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - Processing of / AC Speed+ Sealing at temperatures below +5°C
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

When applying KEMPEROL AC Speed+ waterproofing explosion protection for working equipment is necessary.

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPEROL PU Aqua

Uses

- As surface waterproofing, for creating connections and details in combination with KEMPEROL non-woven fabric
- As a construction product for the repair of roof and building sealing in connection with KEMPEROL fleece
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- UV-resistant
- Solar reflectance index (SRI value) based on ASTM E1980-11: 101
- Thermal emissivity based on ASTM C1371-15: 89 %
- Solar radiation reflectance based on C1371-15: 81 %
- Cold to process
- Water vapor diffusible
- Crack-bridging
- Accessible for maintenance purposes
- Solvent-free
- 1-component
- Ready-to-use
- Lightfast

Usage guide

Depending on the nature of the substrate : min. 2,5 kg/m²

Pack sizes

15 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
Standard colour	
White	
Workability time*	approx. 30 min
Rainproof after*	approx. 5 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 1-2 d
Further coating after*	approx. 1 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

	ETA 18/0161
Water vapor diffusion resistance coefficient	μ ≈ 2870
External fire performance	B_{ROOF}(t1)
Reaction to fire	E
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Only apply at substrate and ambient temperatures of > +10 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

Open the container and stir the material thoroughly and carefully.

Use

Apply approx. 2/3 of KEMPEROL PU Aqua , roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap

and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL PU Aqua onto the still wet first layer, ensuring saturation.

Material, ambient air and substrate temperature must be at least +10°C at a relative humidity < 75% to max. +40°C at a relative humidity < 85%. When executed, the surface temperature must be 3 K above the dew point.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

PPE

Personal protective equipment should be worn. Always clean tools immediately after use with water.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The BG-Chemie data sheets must be observed during processing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL LF

Uses

- As surface waterproofing, for creating connections and details in combination with KEMPEROL non-woven fabric
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Accessible for maintenance purposes
- Solvent-free
- Low-odor
- UV-resistant
- Usable at temperatures higher than + 5 °C
- 1-component
- Plasticizer-free
- Lightfast
- CE marking
- Red algae resistant
- Resin base: Silane modified polymer
- Insensitive to humidity
- Isocyanate-free
- Alkali-resistant

Pack sizes

6.5 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 3,0 kg/m²

Properties

Form	Liquid
Standard colour	Anthracite
Workability time*	approx. 90 min
Rainproof after*	approx. 2 h
Can be walked on after*	approx. 16 h
Cured after*	approx. 16 h**
Further coating after*	approx. / **

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with a layer thickness of 2 mm.

CE marking

External fire performance	$B_{ROOF}(t1)$
Reaction to fire	E
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

Application

Preparing the substrate

The substrate must be sound and free from any material that would hinder adhesion.

For some substrates, e.g. concrete and screed surfaces, a primer may not be necessary depending on the load. In the case of concrete and screed surfaces, care must be taken to ensure that there is no moisture penetration from the rear of the substrate. Generally, the priming recommendations for KEMPEROL LF have to be observed.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

Due to the humidity tolerance of the material KEMPEROL LF can be applied to slightly damp substrates. However, the surface must be free of standing water.

When the product is applied the surface temperature must be above the dew point.

Mixing

Open the container and stir the material thoroughly and carefully.

Use

Apply approx. 2/3 of KEMPEROL LF , roll in the KEMPEROL 165 fleece using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL LF onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

When using the 6.5 kg container indoors, the limit value for methanol is complied with in cross-ventilated work areas.

Work interruption and further coating

Standing time greater than 3 to 14 days: Cleaning the work area with KEMCO MEK Cleaning Agent.

Standing time greater than 14 days: Sanding the existing work area with sandpaper and cleaning the work area with KEMCO MEK Cleaning Agent.

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Please allow for proper ventilation during and after application/curing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RSP20

Issued: Vellmar, 2024-03-04

KEMPEROL V 210 M waterproofing

Uses

- Only suitable for outdoor use
- In combination with KEMPEROL non-woven fabric
- For application of larger areas
- For application under green roofs
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Long-term proven since 1970
- Cold to process
- Water vapor diffusible
- Crack-bridging
- Root-resistant according to FLL test
- Third-party monitored
- Accessible for maintenance purposes
- UV-resistant
- 2-component
- CE marking
- Red algae resistant
- Resin base: Polyester resin

Pack sizes

KEMPEROL V 210 M waterproofing:

Component M 19.4 kg / 9.7 kg

KEMPEROL CP catalyst powder Component C 2 x 0.3 kg / 0.3 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

KEMPEROL CP catalyst powder should be stored separately.

Usage guide

Depending on the condition of the substrate: at least 2,8 kg/m² according to the layer thickness (see Technical Information TI 03 - Layer thicknesses according to the regulations).

Properties

Form	Comp. M liquid
	Comp. C powder
Standard colour	Grey
Special colours	On request
Workability time*	approx. 15 min
Rainproof after*	approx. 30 min
Can be walked on after*	approx. 6 h
Cured after*	approx. 3 d**
Further coating after*	approx. 6 h ****

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with KEMPERDUR Surfacings, see corresponding Technical Data Sheet.

CE marking

Component to	ETA 03/0025
Water vapor diffusion resistance coefficient	μ ≈10960
Resistance to wind loads	>= 50 kPa
External fire performance	B_{ROOF}(t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Prior to the application of the KEMPEROL V210 M Waterproofing , prime with KEMPERTEC Primer according to the primer recommendation.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

At ambient temperatures above +25 °C KEMPEROL UP-I inhibitor in the KEMPEROL V210 M Waterproofing component ;M must be added.

Mixing

Open the container and stir the material thoroughly and carefully.

KEMPEROL V210 M Waterproofing must be poured into a separate container to carry out mixing. In a mixing ratio of 19.4 kg KEMPEROL V210 M Waterproofing with 0.6 kg KEMPEROL CP catalyst powder Mix the component C intensely (approx. 2 min.).

Use

Apply approx. 2/3 of KEMPEROL V210 M Waterproofing and embed the KEMPEROL Fleece using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL V210 M Waterproofing “fresh-on-fresh” onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC AC Primer to the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Work interruption and further coating

Standing time greater than 12 hours: Intensive cleaning of the work area with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL BR M Waterproofing

Uses

- Only suitable for outdoor use
- Combined with the KEMPEROL 165 fleece
- For application of larger areas
- As a waterproofing system for concrete structures, concrete roadways under tarmac layers, car parks, bridges, ramps etc.
- For new buildings and repair work
- Can be applied to practically any substrate

Characteristics

- Cold to process
- Water vapor diffusible
- Crack-bridging
- Third-party monitored
- BAM approved liquid waterproofing system
- Accessible for maintenance purposes
- UV-resistant
- 2-component
- Resin base: Polyester resin

Pack sizes

KEMPEROL BR M Waterproofing,

Component M 19.4 kg

KEMPEROL CP catalyst powder Component C 2 x 0.3 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

KEMPEROL CP catalyst powder should be stored separately.

Usage guide

Depending on the condition of the substrate: at least 2,8 kg/m² according to the layer thickness (see Technical Information TI 03 - Layer thicknesses according to the regulations).

Properties

Form	Comp. M liquid
	Comp. C powder
Standard colour	Translucent
Special colours	On request
Workability time*	approx. 15 min
Rainproof after*	approx. 30 min
Can be walked on after*	approx. 6 h
Ready for vehicular traffic *	approx. 24 h
Cured after*	approx. 3 d**
Further coating after*	approx. 6 h **
with mastic asphalt after	approx. 4–6 h*
Short term temperature resistance	250 °C

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** valid for joint areas. For installation on the entire surface after 2 d.

CE marking

Component to	ETA 03/0026
Water vapor diffusion resistance coefficient	μ ≈10960
Resistance to wind loads	>= 50 kPa
External fire performance	B_{ROOF}(t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Prior to the application of the KEMPEROL BR M Waterproofing , prime with KEMPERTEC Primer according to the primer recommendation.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

At ambient temperatures above +25 °C KEMPEROL UP-I inhibitor in the KEMPEROL BR M Waterproofing component ;M must be added.

Mixing

Open the container and stir the material thoroughly and carefully.

KEMPEROL BR M Waterproofing must be poured into a separate container to carry out mixing. In a mixing ratio of 19.4 kg KEMPEROL BR M Waterproofing with 0.6 kg KEMPEROL CP catalyst powder Mix the component C intensely (approx. 2 min.).

Use

Apply approx. 2/3 of KEMPEROL BR M Waterproofing and embed the KEMPEROL Fleece using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL BR M Waterproofing “fresh-on-fresh” onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing is only conditionally resistant to alkalis. Therefore, if long-term exposure is expected KEMPERTEC EP5 primer or KEMPERTEC AC Primer applied to the waterproofing and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15- Alkalinity).

Work interruption and further coating

Standing time greater than 12 hours: Intensive cleaning of the work area with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable “rules of application” in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL UP-I inhibitor

Uses

- ForExtensionthe processing time for the sealants KEMPEROL V 210 M and KEMPEROL BR M atambient temperaturesabove 25 °C.

Composition

Based on 4-tert-butylcatechol.

Pack sizes

0,3 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

0.3 kg for 20 kg KEMPEROL V 210 M or KEMPEROL BR M sealant.

CE marking

Component to	ETA 03/0025
	ETA 03/0026

Properties

Form	Liquid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

KEMPEROL UP-I Inhibitor to be mixed with a stirring stick or slow-running agitator intensively into the resin component until you achieve a homogeneous and streak-free mixture. At V 210 M and BR M directly into the liquid waterproofing before adding the KEMPEROL CP catalyst powder. Mixing time approx. 1 minute.

The storage suitability of component B is not shortened due to the addition of KEMPEROL UP-I inhibitor .

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider Technical Information TI 23 - solvent-based products.

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL CP catalyst powder

Uses

- Reactant (hardener) for hardening the KEMPEROL V 210 M Sealant and KEMPEROL BR M sealant.
- Reactant (hardener) for hardening of KEMPERTEC AC, KEMPEROL AC and KEMPERDUR AC products

Pack sizes

80 x 300 g (comp. B)

2 x 100 g (comp. B)

3 x 100 g (comp. B)

10 x 100 g (comp. B)

220 x 100 g (comp. B)

20 x 20 g (comp. B)

25 kg (comp. B)

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Must be stored separately. Safety instructions on the packaging and the safety data sheets must be observed.

Usage guide

Refer to the technical data sheet of the corresponding product to determine the quantity of catalyst powder to be added.

Properties

Form	Powder

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0025
	ETA 03/0026
Component to	ETA 03/0025
Component to	ETA 03/0026

Application

Mix according to the mixing instructions for the products mentioned above.

Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles).

Important notes

The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Protect against heat and direct sunlight.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL 022 waterproofing

Uses

- For new buildings and repair work
- As seal in conjunction with KEMPEROL 500 fleece for walls and floors in wet rooms such as
  - House baths
  - Bathrooms in hotels
  - Showers
  - Dishwashing kitchens
  - Washrooms
  - Walks from swimming pools
- Tested according to ETAG 022
- For walls and floors in wet rooms with direct or indirect load and floor drainage

Characteristics

- Stress class A according to ETAG 022 (= high stress)
- Odor-neutral
- Cold to process
- Water vapor diffusible
- Crack-bridging capacity 1.5 mm
- Joint-bridging capability min. 2 mm
- Single-layer processing
- Accessible for maintenance purposes
- Solvent-free
- 2-component
- Resin base: Liquid plastic
- Alkali-resistant

Delivery size

6 kg, 12 kg in sheet steel container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: min. 1,6 kg/m²for a layer thickness of min.1 mm.

Properties

Form	Liquid
Standard colour	Stone grey
Workability time*	approx. 25 min
Rainproof after*	approx. /
Can be walked on after*	approx. 16 h
Cured after*	approx. 72 h
Further coating after*	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

Substrates must be appropriately pre-treated and absorbent substrates must be primed.Generally, the priming recommendations for KEMPEROL 022 Waterproofing have to be observed.

Only apply at substrate and ambient temperatures of > +10 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

KEMPEROL 022 Waterproofing component A must be stirred thoroughly.

Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Use

Apply approx. 2/3 of KEMPEROL 022 Waterproofing, roll in the KEMPEROL 500 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL 022 Waterproofing onto the still wet first layer, ensuring saturation. The fresh KEMPEROL 022 Waterproofing is scattered with KEMCO NQ 0408 Natural Quartz with a consumption of 1-1.5 kg/m². The waterproofing does not require a layer protecting against alkalinity.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Penetrations and details must be completely integrated in the surface waterproofing. Alternatively, it is possible to attach sleeves in advance. Tiles can be glued on immediately after the curing of the KEMPEROL 022 Waterproofing with the KEMPERDUR MT mineral tile adhesive .

Avoid applying the material beyond the area covered by the fleece.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable ETAG 022 in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RE55

Issued: Vellmar, 2024-03-04

KEMPEROL 500 fleece

Uses

- For new buildings and repair work
- Reinforcement for KEMPEROL 022 waterproofing

Characteristics

- Crack-bridging
- System-tested and matched to the application purpose
- Regulates the layer thickness
- Good adaptability
- Base: Polyester

Pack sizes

Rolls

Length in metres: 50 - Width in cm: 70

Length in metres: 25 - Width in cm: 15

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

Properties

Form	solid
Colour	White

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Use

Apply approx. 1 kg KEMPEROL 022 waterproofing to a prepared and pre-treated substrate, immediately roll in the KEMPEROL 500 Fleece without creases and bubbles and press it down. Overlap the individual fleece sections by 5 cm. Subsequently apply approx. 0.8 kg KEMPEROL 022 waterproofing fresh-in-fresh to the KEMPEROL 500 Fleece, ensuring complete saturation, avoid excessive material.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL FALLSTOP

Uses

- Transparent coating for creating fall-through protection for standard weathered and non-weathered skylight domes made of PMMA, PC, PETG, GRP, which are professionally mounted on a skylight base (when used on SHEVS skylight domes, please consult KEMPER SYSTEM).

Characteristics

- Fall-through-proof tested according to GS Bau 18
- Additionally tested fall-through safety at a surface temperature of the skylight domes of -10 °C (based on the GS Bau 18 test)
- Small change in light transmittance (4.5%)
- High elasticity (elongation according to DIN 53504 > 250 %)
- UV and weather resistant
- Ready-to-use
- Ensuring fall-through resistance and increasing the hail resistance class for 5 years.
- An extension of another 5 + 5 years is possible (please KEMPEROL FALLSTOP observe the construction site protocol and warranty conditions).
- Lightfast
- High transparency
- 1-component
- Resin base: Polyurethane resin

Pack sizes

5 kg Container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

1.6 kg/m² The material must be applied evenly in four working steps of at least 400 g/ m². (corresponds to 400 µm on the measuring comb)

Properties

Form	Liquid
Colour	Bluish transparent / glossy
Workability time*	approx. 30 min
Rainproof after*	approx. 4 h
Further coating after*	approx. 4 h
Cured after*	approx. 7 d
Fall-through protection after	approx. 7 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The skylight domes to be coated must be designed to be properly free of defects and professionally mounted on a skylight bas according to the manufacturer's assembly guidelines. Thoroughly clean the skylight with a clean cloth and KEMPERTEC FALLSTOP Cleaner allow to air-drying according to product specifications (see the corresponding Technical information sheet)

In the case of skylights with embrittled or defective sealing lips, the stubborn dirt as well as the old joint residues on the edge of the skylight must first be completely removed. Then the new joint can be filled with the KEMCO GUM Jointing compound filled.

Transition areas between the skylight dome and the frame must be filled flush with KEMCO GUM Jointing compound .There must not be any depressions in which the liberally applied liquid Fallstop can accumulate.

The substrate temperature must be at least 3 K higher than the dew point temperature. Substrate temperature: At least +10°C and relative air humidity: < 80%.

Stir the material carefully and weigh the correct amount for one work step.

Use

Apply the material evenly and without bubbles in a criss-cross fashion using a foam roller. To check the layer thickness repeatedly at various points during application, use the KEMPERTEC® V4A wet film measuring for measuring the layer thickness of the wet film. Due to the shape of skylight domes, go over the material again with a foam roller after initial application, starting at the bottom and working your way upwards, to guarantee an even layer of material and to prevent runs. Depending on the shape of the skylight domes,

if necessary, repeat this procedure again after several minutes to achieve the required layer thickness on all parts of the skylight dome.

Work interruption and further coating

In case of work interruptions > 7 days, the surface must be activated evenly with KEMCO LE Flexo Adhesive Primer .

PPE

During application, always wear personal protective equipment including fall protection equipment to BGR 198. Please ensure good and constant ventilation at the workplace during and after application to guarantee even drying.

Always adhere to the KEMPEROL FALLSTOP application instructions. If necessary, a non-destructive before/after ultrasound measurement, can be carried out to determine the layer thickness of KEMPEROL FALLSTOP (e. g. with the measuring device Olympus 38DL Plus). The dry layer thickness of KEMPEROL FALLSTOP must be at least 0.9 mm.

Note

Please consider Technical Information TI 23 - solvent-based products.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPERTEC FALLSTOP Cleaner

Uses

- Special cleaner for conventional PMMA, PC, PETG, GRP skylight domes

Characteristics

- Low solvent content
- Ready-to-use
- Slightly volatile
- Cleans intensively and streak-free
- Based on an alcoholic solution

Pack sizes

500 ml spray bottle

Shelf Life

Can be stored cool, frost-free and dry.

Usage guide

According to the level of soiling.

Properties

Form	Liquid
Can be coated after*	approx. 15 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The skylight domes to be coated must not be damaged (holes, cracks, etc.) and must be mounted on the roof in accordance with the manufacturers' installation guidelines. The processing instructions KEMPEROL FALLSTOP should be observedKEMPERTEC FALLSTOP Cleaner spray evenly and thinly and rub with a clean cloth or brush. Avoid damaged places Renew the wiping cloths several times. During the processing, personal protective equipment (PPE) should be worn, incl fall protection equipment according to BGR 198.

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

GGL10

Issued: Vellmar, 2024-03-04

KEMCO GUM Jointing compound

Application area

- For connection and construction joints (up to 20 mm) on wood, plastic, mineral substrates or glass indoors and outdoors

Features

- UV- and weather-resistant
- Ready for use
- Strong adhesive
- Elastic
- Suitable to receive a further coat of KEMPEROL
- Suitable to receive paint and coloured surfacing coats
- Resin base: Polyurethane resin

Pack sizes

310 ml cartridges

12 cartridges / carton

Storage

Avoid direct sunlight and frost!

See label for use before date.

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Allow the material to stabilize to between +18°C and +20°C for at least 24 hours prior to use.

See label for use before date.

Consumption

min. 310 ml / 3 rm (joint width 1x1 cm)

Properties

Colour	Grey
Cured after *	approx. 1 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Material, ambient air and substrate temperature must be at least +5°C to max. +30°C with a relative humidity < 80%. When executed, the surface temperature must be 3 K above the dew point.

For porous substrates, such as concrete, screed, aerated concrete blocks, wood-based materials, etc., before processing the KEMCO GUM Jointing compound with KEMCO 1K Primer, KEMCO POX 2K Primer or KEMPERTEC EP5 primer they should be primed.

Remove the aluminum cover. Pierce the protective membrane in the upper threaded part over its entire surface. Now unscrew the plastic nozzle and cut off diagonally, depending on the desired application thickness. Use the cartridge in the hand gun and in the compressed air gun (2-4 bar). Before starting the work, it is essential to check the joints to be filled, for their suitability and eliminate any possible causes of deficiencies. Trapped moisture can cause blistering and detaching. KEMCO GUM Jointing compound may only have a 2-flank adhesion during processing. Avoid a three-point adhesion by filling the joint with backfill material (z.B. PE round rubber cord).

Personal protective equipment must be worn.

GISCODE

PU40

Disposal

Liquid	EAK 08 05 01
cured	EAK 17 02 03

Issued: Vellmar, 2024-03-04

KEMCO LE Flexo Adhesive Primer

Application area

- Acts as an activator for KEMPEROL FALLSTOP in case of work interruptions > 7 d

Features

- Lightfast
- Low viscosity
- Transparent
- Low consumption
- 1 part (single component)
- Ready for use
- Resin base: Polyurethane resin

Container size:

1 l container

Storage

Avoid direct sunlight and frost!

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

To achieve the best results, it is recommended to store the product at room temperature for approx. 24 hours prior to use.

Opened containers must be sealed air tight and should be used as soon as possible.

See label for use before date.

Material consumption:

at least 50 ml/m²

Properties

Form	Liquid
Colour	Transparent
Cured after *	approx. 60 min.
Recoatable after*	approx. 1 h to max. 6 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Application

Use a cloth to apply the material thinly and evenly to the whole area of the substrate

Personal protective equipment must be worn.

Sufficient ventilation is essential to guarantee full curing. Always adhere to relevant rules and regulations.

For further information on application, please refer to the separate technical data sheets and the application instructions.

Important note

Please refer to the respective safety data sheet for hazard warnings, protective measures, hazardous substance classes and correct disposal!

Disposal

Liquid	EAK 08 05 01
cured	EAK 17 02 03

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPEROL RepairFix LF

Uses

- Suitable for indoor and outdoor applications
- For repairing leaks
- On bitumen substrates, metals, synthetic materials (excluding PE/PP), roof tiles and mineral substrates

Characteristics

- Can be further coated
- Solvent-free
- Low-odor
- 1-component
- Fiber-reinforced
- Highly viscous
- Immediately processable
- Quick rainproof
- UV and weather resistant
- Permanently elastic & crack-bridging (approx. 2 mm)
- Water repellent
- Heat and frost resistant
- Can be processed even in light rain
- Resin base: Silane modified polymer
- Isocyanate-free
- Silicone-free
- Alkali-resistant
- Usable at temperatures higher than +5 °C

Shelf Life

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Avoid direct sunlight!

Pack sizes

1 kg in container

Usage guide

Depending on the character of the substrate: at least 2.0 kg/m²

Properties

Form	high viscosity
Colour	Grey
Workability time *	approx. 30 min
Rainproof after *	approx. 10 min
Can be walked on after *	approx. 16 h
Fully cured after *	approx. 16 h*
Further coating after *	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature. with a layer thickness of 1.5 mm.

Application

Preparing the substrate

Substrates must be firm and free from any substances that could hinder adhesion.

Smooth substrates must be sanded slightly and cleaned. KEMPEROL RepairFix LF can also be applied when it is raining slightly. Use a towel to remove any standing water from the substrate prior to application.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

Due to the humidity tolerance of the material KEMPEROL RepairFix LF can be applied to slightly damp substrates. However, the surface must be free of standing water.

Use

Open the container and stir the material thoroughly and carefully. Apply the material undiluted. KEMPEROL RepairFix LF is applied evenly on the substrate using a brush or a spatula and worked in thoroughly while applying slight pressure. It may be necessary to apply a further coat in the case of extreme loads, vertical surfaces, cracks and uneven surfaces once the first coat has cured.

PPE

Personal protective equipment should be worn.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RSP20

Issued: Vellmar, 2024-03-04

KEMPEROL Roofpatch

Uses

- For repairing leaks
- For flat and sloping surfaces

Characteristics

- Water vapor diffusible
- Crack-bridging
- Non-woven fabric-reinforced
- Cold to process
- Solvent-free
- UV-resistant
- 1-component
- Resin base: Silane modified polymer

Pack sizes

41 x 27 cm in aluminium bags

5 pieces in a cardboard box

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Colour	anthracite
Workability time *	approx. 90 min
Rainproof after *	approx. 2 h
Can be walked on after *	approx. 16 h
Cured after*	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

On the following substrates, the KEMPEROL Roofpatch can be applied without primer:

Surfaces	No priming
Standard bitumen sheets	+
PVC roof sheets	+
Concrete	+
Wood	+
Screed	+
Resin-modified screed	+
Metal	+

Lay the aluminium bag down flat and use the edge of your hand to spread the material inside the bag evenly. Take the gloves attached to the bag and put them on. Open the bag at the provided tear aid, pull out the KEMPEROL Roofpatch and apply it to the area to be waterproofed. Smooth the material, making sure there are no creases and air bubbles. While still wet, the KEMPEROL Roofpatch can be scattered with slate chips to match the existing roof surface.

PPE

Personal protective equipment should be worn.

Important information

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

The BG-Chemie technical data sheets must be observed during application.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL 120 fleece

Uses

- For new buildings and repair work
- Reinforcement for KEMPEROL waterproofing
- For use in the regeneration layer

Characteristics

- System-tested and matched to the application purpose
- Regulates the layer thickness
- Good adaptability
- Base: Polyester

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

Pack sizes

Rolls

Length in metres: 50

Width in cm: 105 / 52.5 / 35 / 26.25

Consumption

Consumption of waterproofing when used with KEMPEROL 120 Fleece

Waterproofing	Consumption	Layer thickness
KEMPEROL 2K-PUR	min. 1,6 kg/m²	approx. 1,4 mm
KEMPEROL 1K-PUR	min. 2,5 kg/m²	approx. 1,2 mm
KEMPEROL 1K-SF	min. 2,4 kg/m²	approx. 1,6 mm
KEMPEROL AC Speed	min. 2,2 kg/m²	approx. 1,7 mm
KEMPEROL AC Speed+	min. 2,2 kg/m²	approx. 1,9 mm
KEMPEROL PU Aqua	min. 3,0 kg/m²	approx. 1,4 mm
KEMPEROL LF	min. 2,4 kg/m²	approx. 1,8 mm

Normative specifications from the relevant waterproofing standards must be observed and complied with.

Properties

Form	solid
Colour	White
Weight [g/m²]	approx. 120

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0043
	ETA 12/0416
	ETA 03/0044

Application

Use

Apply approx. 2/3 of KEMPEROL sealant to the prepared and pre-treated substrate, immediately lay in KEMPEROL 120 Fleece without wrinkles or bubbles and press on. Lay the individual non-woven fabric sheets with an overlap of at least 5 cm.Further fresh-in-fresh with approx. 1/3 KEMPEROL sealant soak the inserted KEMPEROL 120 Fleece completely until saturation, avoid excess material.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPEROL 165 fleece

Uses

- For new buildings and repair work
- Reinforcement for KEMPEROL waterproofing

Characteristics

- Easier processing due to better non-woven fabric impregnation
- System-tested and matched to the application purpose
- Regulates the layer thickness
- Good adaptability
- Base: Polyester

Pack sizes

Rolls

Length in metres: 50

Width in cm: 105 / 70 / 52.5 / 42 / 35 / 26.25 / 21 / 10.5

Properties

Form	solid
Colour	White
Weight [g/m²]	approx. 165

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

CE marking

Component to	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Use

Apply approx. 2/3 of KEMPEROL sealant to the prepared and pre-treated substrate, immediately lay in KEMPEROL 165 Fleece without wrinkles or bubbles and press on. Lay the individual non-woven fabric sheets with an overlap of at least 5 cm.Further fresh-in-fresh with approx. 1/3 KEMPEROL sealant soak the inserted KEMPEROL 165 Fleece completely until saturation, avoid excess material.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMCO RC Fleece Circles

Application area

- For new buildings and repair work
- Pre-cut segments as additional reinforcement for corners

Features

- System-tested and adapted to the intended purpose
- Excellent adaptability
- Basis: Polyester

Storage

Protect against moisture, store horizontally in a dry place without creases.

Pack sizes

Box with 50 pcs

Application

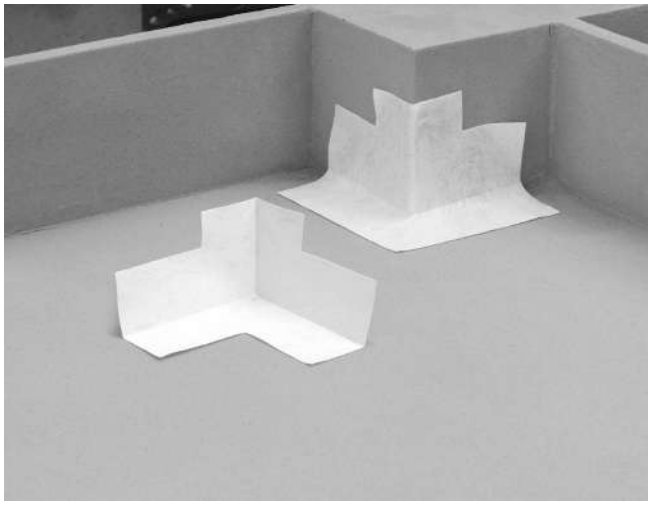
KEMPEROL Waterproofing is applied to the substrate. The KEMCO RC Fleece Circles are applied as an additional reinforcement and pressed down with a brush. KEMPEROL Waterproofing is applied to the first coat until the fleece is fully saturated. Then the fleece-reinforced waterproofing is applied to the edge and the surface.

Disposal

Fleece	EAK 04 02 21

Issued: Vellmar, 2024-03-04

KEMCO IC Fleece inner corner and KEMCO OC Fleece outside corner



Uses

- Pre-cuttings as an additional reinforcement for corners

Characteristics

- System-tested and matched to the application purpose
- Good adaptability
- Base: Polyester

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

Pack sizes

20 pces in a box

Application

The KEMPREROL waterproofing is applied to the substrate. The KEMCO IC Fleece inner corner or KEMCO OC Fleece outside corner is applied as an additional reinforcement and pressed down with a brush. The KEMPEROL waterproofing is applied to the first coat until the fleece is fully saturated. Then the fleece-reinforced waterproofing is applied to the edge and the surface.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMCO RS Reinforcement

Application area

- For bridging when butt-jointing the fleece reinforcement
- For creating an even waterproofing surface
- For new buildings and repair work

Features

- Compatible with the system
- Increased tear strength
- Basis: Polyester

Pack sizes

Rolls of 50 rm, 15 cm wide

Storage

Protect against moisture, store horizontally in a dry place without creases.

Properties

Colour	white
Weight	approx. 46 g/m²

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Consumption

Per meter of butt jointed KEMPEROL Fleece 1 m KEMCO RS Reinforcement .

CE marking

Component to 3	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

KEMCO RS Reinforcement is to be centered over the butt joint when laying KEMPEROL Fleece in a butt jointed way.

Disposal

Reinforcement Strips	EAK 04 02 21

Issued: Vellmar, 2024-03-04

KEMPERDUR Deko

Uses

- A decorative finish for balconies, terraces and roofs
- To visually enhance and improve cleaning of surfaces
- As a coating for concrete and screed surfaces in outdoor areas
- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- On KEMPERDUR TC coating

Characteristics

- UV-resistant
- Decorative
- Lightfast
- 1-component
- Low solvent content
- Resin base: Polyurethane resin

Pack size

6 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 1,2 kg/m²

Properties

Form	Liquid
Colour	Light grey
	Stone grey
	Beige
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 3 d
Cured after*	approx. 7 d
Further coating after *	approx. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

For a level surface, we recommend to lay the KEMPEROL Sealing butt-joined in combination with the KEMCO RS Reinforcement . The periods mentioned in the technical data sheets of the individual sealing products apply with regard to the suitability for further coating.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point
- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off.

At temperatures below 10 °C, up to 250 ml of KEMCO 1K Thinner can be added to the 6 kg container.

Mixing

Open the container and stir the material thoroughly and carefully.

Application

For a full-surface coating, the specified KEMPERDUR Deko may have to be applied in two work steps using a nylon roller or a paintbrush.

Only use containers with the same batch number in order to avoid differences in colour over one surface.

To create a more interesting surface finish, KEMPERDUR CL Chips or KEMPERDUR CS Microchips can be worked into the fresh surfacing, which must be sealed with KEMPERDUR Finish.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPERDUR Deko 2K

Uses

- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- On KEMPERDUR TC coating
- To enhance the decorative appeal of balconies, terraces and flat roofs
- As a paint/coating for industrial floors
- As a decorative paint/coating indoors
- As a coating for concrete and screed - indoors and outdoors

Characteristics

- UV-resistant
- Decorative
- Lightfast
- Solvent-free
- Low-odor
- 2-component
- Resin base: Polyurethane resin

Pack sizes

6 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: at least 1,2 kg/m² for a layer thickness of approx. 0.5 mm.

Properties

Form	Liquid
Colour	Light grey
Workability time *	approx. 30 min
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 72 h
Further coating after *	approx. 12 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

If the coating is used without waterproofing on concrete and screed surfaces indoors and outdoors, it must be primed with KEMPERTEC EP5 primer as well.

For a level surface, we recommend to lay the KEMPEROL Sealing butt-joined in combination with the KEMCO RS Reinforcement . The periods mentioned in the technical data sheets of the individual sealing products apply with regard to the suitability for further coating.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

The viscosity increases as the temperature drops.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point

- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off.

Mixing

Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

For a full-surface coating, the specified KEMPERDUR Deko 2K may have to be applied in two work steps using a nylon roller or a paintbrush.

Alternatively, apply the coating using a notched trowel.

Only use containers with the same batch number in order to avoid differences in colour over one surface.

For a more lively surface design, KEMPERDUR CL Chips or KEMPERDUR CS Microchips can be sprinkled into the fresh coating. If necessary, these can be sealed with KEMPERDUR Finish (solvent-based!) after 12 hours at the earliest.

Any unevenness resulting from the substrate cannot be levelled out with KEMPERDUR Deko 2K.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools wit water immediately after use.

Note

Please consider the following technical information:

- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU40

Issued: Vellmar, 2024-03-04

KEMPERDUR HB thick coating

Uses

- For new buildings and repair work
- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- To coat and enhance the decorative appeal of:
  - balconies and terraces
  - walkways and stairways
  - floors in commercial, retail and leisure premises
  - basements, etc.
- As a coating for concrete and screed - indoors and outdoors

Characteristics

- Homogeneous
- UV-resistant
- Decorative
- Lightfast
- Solvent-free
- 3-component
- High wear protection
- Resistant to flying sparks and radiant heat according to DIN EN 13501-5
- Resin base: Polyurethane resin
- Special KEMPERDUR quartz mixture as component C

Pack sizes

15 kg 3-component working unit

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: at least 6 kg/m² for a layer thickness of approx. 3 mm.

Vertical surfaces: KEMPERDUR HB thick coating without quartz sand mixture or KEMPERDUR Deko 2K to be used observe the Technical information sheet of KEMPERDUR Deko 2K!

Properties

Form	Comp. A liquid
	Comp. C granular
Colour	Light grey
Workability time *	approx. 30 min
Rainproof after*	approx. 5 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 3–7 d
Further coating after *	approx. 12 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

If the coating is used without waterproofing on concrete and screed surfaces indoors and outdoors, it must be primed with KEMPERTEC EP5 primer as well.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

The viscosity increases as the temperature drops.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point
- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off
- KEMPEROL 1K-PUR waterproofing it must be hardened for at least 7 days and adhere to the entire surface; air pockets and defects must be repaired before further coating.
- KEMPEROL 2K-PUR waterproofing it must be hardened for at least 24 hours and adhere to the entire surface; air pockets and defects must be repaired before further coating.
- A fully bonded, 2 mm profile can be used as an edge finish.

For a level surface, we recommend to lay the KEMPEROL waterproofing butt-joined in combination with the KEMCO RS Reinforcement Strip .

Mixing (for horizontal surfaces, max. 2% slope)

Stir component A, add component B and mix with a slow-running mixing device, then add component C and mix with the slow-running mixing device, pour into a clean container and mix again. At a lesser slope and/ or lower temperatures, component C can be reduced by 10 to 20%.

Application

Use a notched trowel (V notch) to distribute the ready-to-use mixture on the surface being coated, a smoothing trowel to ensure a uniform surface appearance and then immediately use a spiked roller to remove any air bubbles. Within the workability time, the product KEMPERDUR CS Microchips or KEMPERDUR CL Chips is blown evenly onto the surface thus produced using a chip gun or sprinkled onto the surface by hand.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

Fresh coatings have to be protected against direct influence of dirt, humidity and water for at least 5 hours.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Depending on the nature and condition of the substrate, unevenness or overlaps may remain visible after application of the coating. This can be prevented by a higher level of consumption of the coating product, which has to be factored in.

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU40

Issued: Vellmar, 2024-03-04

KEMPERDUR TC coating

Uses

- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- As a wearing surface
- On solid load-bearing substrates (e.g.: concrete, screed etc.)
- For the coating of:
  - parking decks, driveways, courtyards and ramps
  - balconies, terraces and covered walkways
  - shop floors, halls and basements

Characteristics

- Odor-neutral
- Solvent-free
- 3-component
- Early accessibility
- Self-leveling
- High wear protection
- Long-term resistant
- Not color-stable
- Resin base: Polyurethane resin

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Pack sizes

12.5 kg pack

Pack consisting of:

- 4.69 kg component A
- 1.56 kg component B
- 6.25 kg component C

6.25 kg pack as a additional coating applied by roller (without comp. C filler)

Usage guide

at least 4.0 kg / m²KEMPERDUR TC coating with
a) at least 4 kg/m² KEMPERDUR CQ 0408 Colorquarz**or**
b) at least 4 kg/m² KEMCO NQ 0712 Natural Quartz**or**
c) at least 4 kg/m² KEMCO NQ 0408 Natural Quartz.

Consumption when applied with a roller:

at least 0.4 kg/m²

Properties

Form	Comp. A liquid
	Comp. C granular
Workability time *	approx. 15 min
Rainproof after*	approx. 4 h
Can be walked on after*	approx. 4 h
Ready for vehicular traffic *	approx. 8 h
Cured after*	approx. 8 h
Further coating after *	approx. 4 h
Next coat must be applied within*	max. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

If the coating is used without waterproofing on concrete and screed surfaces indoors and outdoors, it must be primed with KEMPERTEC EP5 primer as well.

Can be applied on an existing waterproofing system according to the times given for further coating in the respective technical data sheet. The priming recommendations have to be observed.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

The viscosity increases as the temperature drops.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point
- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off.

Mixing

Add component B to component A and mix until you have a streak-free mixture.

Then add the entire package of KEMPERDUR TC surfacing component C (filler) gradually and stir in with a slow-running mixing device - mix until you achieve a homogeneous mixture. The ready-to-use mixture must be spread evenly over the surface to be coated using a scraper or a toothed trowel.In case of surfaces with a slope higher than 3%, in the components A 2 % KEMCO TX Thixotropic Additive should be stirred before mixing. KEMPERDUR TC coating should be provided with a mineral spreading or a coating, because KEMPERDUR TC coating it is not color-stable.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Mineral scattering on parking decks

The still wet KEMPERDUR TC coating is scattered liberally after approx.30 min with

- KEMPERDUR CQ 0408 Colorquarz
- KEMCO Coloured quartz
- KEMCO NQ 0712 Natural Quartz
- or KEMCO NQ 0408 Natural Quartz

over the entire surface (leaving no gaps). After curing - depending on the weather conditions - brush off the excess material and seal with KEMPERDUR Finish glossy or KEMPERDUR Finish matt.

On balconies and patios

KEMPERDUR TC coating can be sealed with a coloured finish using KEMPERDUR Deko 2K and KEMPERDUR Deko. After application, a spiked roller is used to remove any air bubbles from the still wet KEMPERDUR TC coating or KEMPERDUR CQ Quartz is scattered as an alternative quartz layer (sealing with KEMPERDUR Deko transparent). In this field of application (e.g. with non-woven fabric overlaps), KEMPERDUR TC coating can also be used as a leveling layer in combination with KEMPERTEC EP5 primer or KEMPERTEC AC Primer as an alkali protection layer under tile coverings (see also Technical Information TI 15 - Alkalinity).

As a coating applied by roller

The KEMPERDUR TC coating can also be used as brick-on-end course on a cured KEMPERDUR TC coating . For this purpose, KEMPERDUR® TC is used without the Component C (filler). Mix component B into component A until you achieve a streak-free mixture, transfer the mixture into a new container and apply with a roller with a consumption of approx. 0.4 kg/m² onto the surface. After a curing time of approx. 15-20 min the desired quartz sand can be scattered onto the whole surface (leaving no gaps) and then be sealed.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 29 - slip resistance

Important notes

Always add the whole contents of the container of component C (filler material) to the mixture. Do not divide the contents of the container up. Fresh coatings have to be protected against contamination, humidity and moisture for a period of 4 hours.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Depending on the nature and condition of the substrate, unevenness or overlaps may remain visible after application of the coating. This can be prevented by a higher level of consumption of the coating product, which has to be factored in.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

Issued: Vellmar, 2024-03-04

KEMPERDUR AC coating

Uses

- As a coating in combination with the KEMPERDUR AC filler and KEMPERDUR AC (Comp. A) on KEMPEROL AC Speed
- For new buildings and repair work

Characteristics

- Fast hardening
- UV-resistant
- Solvent-free
- Environmentally declared according to valid international standards (EPD)
- 3-component
- High wear protection
- Resin base: PMMA
- Alkali-resistant

Pack sizes

10 kg container (component A) in combination with KEMPEROL CP catalyst powder (component B; refer to the Curing Table for recommended quantities) and 23 kg bag KEMPERDUR AC filler.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate, in conjunction with KEMPERDUR AC filler: at least 4,0 kg/m².

Properties

Form	Comp. A liquid (light gray)
	Comp. B powder
	Comp. C granular (sandy)
Colour	Grey
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 20 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. 35 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg KEMPERDUR AC coating

Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
+5°C	400	35 min	70 min
+10°C	400	30 min	60 min
+20°C	200	20 min	35 min
+30°C	100	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures above +25°C, protect the material against direct sunlight.

KEMPERDUR AC (comp. A) must only be used in combination with KEMPEROL CP catalyst powder. The quantity of catalytic powder depends on the respective material temperature (refer to the Curing table).

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPERDUR AC coating component A.

In case of surfaces with a slope higher than 3%, in the KEMPERDUR AC coating KEMCO TX Thixotropic Additive are strirred in. The exact mixing ratio can be found in the technical data sheet for KEMCO TX Thixotropic Additive can be found.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

The surfacing consists of KEMPERDUR AC coating, the product KEMPEROL CP catalyst powder and the product KEMPERDUR AC filler. Please refer to the instructions for use for further information. Use a spiked roller to remove any air bubbles from the still wet KEMPERDUR AC coating directly after it has been applied.Once the surface of the coating is tack-free, after approx. 60 minutes KEMPERDUR AC-Finish is applied.

The mixture is applied with a notched trowel with a thickness of approx. 8 mm over the entire prepared substrate. Alternatively, use a screed rake (V notch, notch height 6.6 mm) to spread the mixture over the entire surface. After application, use a spiked roller to remove any air bubbles from the still wet coating.

Depending on the version, the still wet KEMPERDUR AC coating is scattered liberally with KEMCO NQ 0408 Natural Quartz or KEMPERDUR CQ 0408 Colorquarz (approx.4 kg/m²). Sweep off any excess after curing and apply KEMPERDUR AC-Finish for a coloured or transparent seal coating.

PMMA surfaces must be cleaned with KEMCO MEK Cleaning Agent if left open for more than 3 days.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products

Important notes

When applying KEMPERDUR AC coating explosion protection for working equipment is necessary.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERDUR AC filler

Uses

- Quartz sand mixture to produce a coating consisting of KEMPERDUR AC coating or KEMPERDUR AC Park

Characteristics

- Graded grading curve
- System-tested and matched to the application purpose

Pack sizes

23 kg in paper bag

Usage guide

as KEMPERDUR AC coating:

min. 4.0 kg/m² (2.8 kg KEMPERDUR AC filler) KEMPERDUR AC coating at a layer thickness of 3 mm.

KEMPERDUR AC Coating System working packs consist of:

- 10.0 kg KEMPERDUR AC coating as component A
- KEMPEROL CP catalyst powder acc. to Table as a component B
- 23 kg KEMPERDUR AC filler as Component C.

as KEMPERDUR AC Park:

at least 4.0 kg/m² (2.8 kg KEMPERDUR AC filler)

Working packings of the coating consist of:

- 10.0 kg KEMPERDUR AC Park as component A
- KEMPEROL CP catalyst powder acc. to Table as a component B
- 23 kg KEMPERDUR AC filler as component C.

Shelf Life

Keep cool and dry. The bags must be kept air-tight.

Properties

Form	Granular /solid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Work steps after preparation of the substrate:

- Mixing in of KEMPEROL CP catalyst powder in KEMPERDUR AC coating
- Mixing in of KEMPERDUR AC filler

Mixing must be carried out with a slow-running mixing device (preferably a positive mixer) until you achieve a homogeneous mixture.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles).

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERDUR AC Park

Uses

- As a drivable utility pavement for level surfaces (< 3 %) in combination with the KEMPERDUR AC filler on KEMPEROL AC Speed
- As OS 10 proven system for parking decks and parking areas
- As OS 8 tested system for DIN 18531-5 and 18532-6
- For new buildings and repair work

Characteristics

- Fast hardening
- UV-resistant
- Solvent-free
- Environmentally declared according to valid international standards (EPD)
- 3-component
- High wear protection
- Resin base: PMMA
- Alkali-resistant
- Color designable

Pack sizes

10 kg container (component A) in combination with KEMPEROL CP catalyst powder (component B; refer to the Curing Table for recommended quantities) and 23 kg bag KEMPERDUR AC filler.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate, in conjunction with KEMPERDUR AC filler: at least 4,0 kg/m².

Properties

Form	Comp. A liquid (light gray)
	Comp. B powder
	Comp. C granular (sandy)
Colour	Grey
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 15 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. 35 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg
KEMPERDUR AC Park

Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
+5°C	400	35 min	70 min
+10°C	400	30 min	60 min
+20°C	200	20 min	35 min
+30°C	100	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures above +25°C, protect the material against direct sunlight.

KEMPERDUR AC Park may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPERDUR AC Park component A.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

The surfacing consists of KEMPERDUR AC Park, the product KEMPEROL CP catalyst powder and the product KEMPERDUR AC filler.

The mixture is applied with a notched trowel with a thickness of approx. 8 mm over the entire prepared substrate. Alternatively, use a screed rake (V notch, notch height 6.6 mm) to spread the mixture over the entire surface. After application, use a spiked roller to remove any air bubbles from the still wet coating.

The still wet KEMPERDUR AC Park coating is scattered liberally with KEMCO NQ 0408 Natural Quartz (4 kg/m²). Sweep off any excess after curing and apply KEMPERDUR AC-Finish for a coloured or transparent seal coating.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products

Important notes

When applying KEMPERDUR AC Park explosion protection for working equipment is necessary.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERDUR AC-Finish

Uses

- For sealing KEMPERDUR AC products, with KEMPERDUR CQ 0408 Colorquarz/ KEMCO NQ 0408 Natural Quartz scattered TC surfaces, KEMPEROL 2K-PUR, KEMPEROL V 210 M and KEMPEROL BR M waterproofing.

Characteristics

- Fast hardening
- Decorative
- Matt
- Lightfast
- Solvent-free
- 2-component
- Resin base: PMMA

Pack sizes

5 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B) Quantity added -see Table Hardening

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 0,75 kg/m²

Properties

Form	Comp. A liquid
	Comp. B powder
Standard colour	Traffic grey
	Light grey
	Stone grey
	Beige
	Pebble grey
	Pure white
	Transparent
	light ivory
	orange brown
	light blue
	traffic red
	traffic blue
	traffic yellow **
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 20 min
Rainproof after*	approx. 30 min
Can be walked on after*	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

** only as marking color

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 5 kg
KEMPERDUR AC-Finish

Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Surface cured [min]
+5°C	200	35 min	60 min
+10°C	200	30 min	45 min
+20°C	100	20 min	30 min
+30°C	50	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

Only apply at ambient and substrate temperatures of below 30°C to achieve a seamless and streak-free surface (store materials at room temperature).

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

KEMPERDUR AC-Finish may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Mixing

KEMPERDUR AC-Finish component A must be stirred thoroughly. Then add KEMPEROL CP catalyst powder and mix in thoroughly.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

KEMPERDUR AC-Finish must be spread evenly immediately after mixing with KEMPEROL CP catalyst powder.

Apply evenly in one operation using a nylon roller. To create a decorative surface, the KEMPERDUR CS Microchips can be blown evenly onto the surface thus applied using a chip gun or sprinkled onto the surface by hand.

When applying KEMPERDUR AC-Finish Transparent it must be made sure that the substrate is level, KEMPERDUR AC-Finish Transparent is applied with a uniform layer thickness and the applied quantity does not exceed 1 kg/m².

PPE

Sufficient ventilation is required. The corresponding instructions should be followed.Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles). We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 24 - cleaning and maintenance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERDUR AC Park+

Uses

- As a drivable utility pavement in combination with the KEMPERDUR AC Park+ special filler on KEMPEROL AC Speed
- Also possible without waterproofing depending on the respective requirement
- As an OS 10 tested system for parking decks, parking spaces and ramps
- For new buildings and repair work

Characteristics

- Fast hardening
- UV-resistant
- Solvent-free
- Environmentally declared according to valid international standards (EPD)
- 3-component
- High wear protection
- Resin base: PMMA
- Alkali-resistant

Pack sizes

15 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B). Quantity added - see Table Hardening 25 kg bag KEMPERDUR AC Park+ special filler (component C).

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate, in conjunction with KEMPERDUR AC Park+ special filler: at least 4,0 kg/m².

Properties

Form	Comp. A liquid
	Comp. B powder
	Comp. C granular
Colour	Stone grey
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 15 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 60 min
Cured after*	approx. 60 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 15 kg
KEMPERDUR AC Park+

Temperature [°C]	KEMPEROL CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
+5°C	600	35 min	70 min
+10°C	600	30 min	60 min
+20°C	300	20 min	35 min
+30°C	150	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures above +25°C, protect the material against direct sunlight.

KEMPERDUR AC Park+ may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPERDUR AC Park+ component A.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

The surfacing consists of KEMPERDUR AC Park+, the product KEMPEROL CP catalyst powder and the product KEMPERDUR AC Park+ special filler.

Spread the mixture with a smoothing trowel across the entire surface of the prepared substrate over the grain and then work your way over the entire surface once more with the nylon roller (18 cm wide).

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products

Important notes

When applying KEMPERDUR AC Park+ explosion protection for working equipment is necessary.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERDUR AC Park+ special filler

Uses

- Quartz sand mixture for creating a coating from KEMPERDUR AC Park+

Characteristics

- Graded grading curve
- System-tested and matched to the application purpose

Pack size

25 kg paper bag

consumption

At least 4.0 kg/m² (2.5 kg KEMPERDUR AC Park+ special filler) KEMPERDUR AC Park+ for a layer thickness of 3mm.

Waterproofing packages consist of:

- 15 kg KEMPERDUR AC Park+ as Component A
- KEMPEROL CP catalyst powder acc. to Table as a component B
- 25 kg KEMPERDUR AC Park+ special filler as Component C.

Shelf Life

Keep cool and dry. The bags must be kept air-tight.

Properties

Form	Granular /solid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Work steps after preparation of the substrate:

- Mixing in of KEMPEROL CP catalyst powder in KEMPERDUR AC Park+
- Mixing in of KEMPERDUR AC Park+ special filler

Mixing must be carried out with a slow-running mixing device (preferably a positive mixer) until you achieve a homogeneous mixture.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles).

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERTEC AC Jointing compound

Uses

- Joint filling compound in conjunction with PMMA products from KEMPER SYSTEM

Characteristics

- Can be used at temperatures between -5°C and +30°C
- Fast hardening
- Excellent adhesion to PMMA substrates
- Application-friendly
- Elongation up to 300 %
- High chemical resistance
- Can also be incorporated at low temperatures
- Excellent waterproof properties
- High resistance
- Processable down to -5 °C ambient temperature
- High wear protection
- Resin base: PMMA

Consumption

at least mind. 40G/ linear m at 0.25cm² joint cross-section

Delivery size

5 kg container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
Colour	Pebble grey
Workability time *	approx. 20 min (2% KEMPEROL CP catalyst powder)
Cured after*	approx. 2 h depending on the width and depth of the joint

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 5 kg
KEMPERTEC AC joint grouting

Temperature [°C]	KEMPEROL CP Cat.powder quantity [g]
-5 to + 1°C	300
0 to + 4°C	300
+5 °C to +10 °C	200
+11 °C to +14 °C	150
+15 °C to +25 °C	100

Application

Preparing the substrate

PMMA surfaces must be cured, dry, stable, free from substances impairing adhesion and shall be prepared appropriately. The joints in PMMA surfaces to be backfilled must be cleaned with KEMCO MEK Cleaning Agent and slightly roughened with abrasive paper (P>180), if they are exposed for more than 3 days.

KEMPERTEC AC joint grouting may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

In order to avoid a 3 flank adhesion, the horizontal area of a joint shall be separated, e.g. by means of a PE fabric tape.

Joints may be filled to a maximum height of 1 cm and width of 6 cm per operation.

Application

Mix the KEMPEROL CP catalyst powder component B intensively and without streaks in KEMPERTEC AC joint grouting component A. The streak-free mixture can be poured directly from the container. Depending on the size of the joint, a suitable pouring cup should be used.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - Processing of / AC Speed+ Sealing at temperatures below +5°C

Important information

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERTEC AC GF Gradient filler

Uses

- As a leveling compound for leveling of unevenness
- For creating slopes up to 4%
- For new buildings and repair work

Characteristics

- Good resistance to weathering
- Can be used at temperatures between +5°C and +30°C
- Fast hardening
- Compatible with the KEMPEROL AC system
- High chemical resistance
- Resin base: PMMA
- Easy to process

Consumption

Per mm of layer thickness: at least 2.1 kg/m².

Pack size

25 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B), quantity added - see Table

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Colour	Light grey
Workability time*	approx. 15 min
Rainproof after *	approx. 40 min
Can be walked on after *	approx. 2 h
Cured after*	approx. 72 h
Further coating after *	approx. 2 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 25 kg
KEMPERTEC AC GF Gradient fillers

Temperature [°C]	KEMPEROL CP Cat. powder - quantity [g]
+5 °C to +10 °C	160
+11 °C to +15 °C	120
+16 °C to +25 °C	80
+26 °C to +30 °C	40

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Before applying KEMPERTEC AC GF Gradient filler the substrate must first be primed with KEMPERTEC AC Primer (consumption min. 0.5 kg/m²).

(refer to Technical Information TI 21 - Substrate Assessment)

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC GF Gradient fillers may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Partial quantities can be taken. Table Hardening must be observed accordingly.

Mixing

KEMPERTEC AC GF Gradient fillers component A must be stirred thoroughly.

KEMPEROL CP catalyst powder Mix in the component B intensively in KEMPERTEC AC GF Gradient fillers component A. KEMPERTEC AC GF Gradient fillers immediately apply on the primed substrate.

Please note that the maximum layer thickness of 30 mm per layer must not be exceeded!

Work interruption and further coating

After hardening of the KEMPERTEC AC GF Gradient filler can be worked on directly without primer using the KEMPEROL and KEMPERDUR AC system.

KEMPERTEC AC GF Gradient filler it may lie for a maximum of 3 months without subsequent sealing. For a standing time > 3 months, the surface must be well cleaned, degreased and mechanically sanded.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Important information

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

When applying KEMPERTEC AC GF Gradient fillers explosion protection for working equipment is necessary.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERTEC AC RM Repair Mortar

Uses

- For re-profiling
- As a filler compound for leveling of unevenness
- For repairing breakouts and holes up to 20 mm depth

Characteristics

- Fast hardening
- Compatible with the KEMPEROL AC system
- High elasticity
- Resin base: PMMA

Consumption

Per mm of layer thickness: at least 1.4 kg/m².

Pack size

10 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B), quantity added - see Table

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	thixotropic
Colour	Grey
Workability time*	approx. 10 min
Rainproof after *	approx. 35 min
Can be walked on after *	approx. 60 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes palce with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg
KEMPERTEC AC RM reparation fillers

Temperature [°C]	KEMPEROL CP Cat. powder - quantity [g]	Pot life in the container [min]	Surface hardened [min]
+5°C	400	30 min	60 min
+10°C	400	25 min	50 min
+20°C	200	10 min	30 min
+25°C	200	10 min	30 min
+30°C	100	10 min	25 min

Application

The substrate must be dry, sound and free from any material that would hinder adhesion.

The priming recommendations should be followed.

KEMPERTEC AC RM reparation fillers It must be processed only for substrate temperatures and ambient temperatures between 5 °C bis max. 30 °C

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC RM reparation fillers may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

KEMPEROL CP catalyst powder component B to be mixed thoroughly into KEMPERTEC AC RM reparation fillers component A.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

KEMPEROL CP catalyst powder Mix in the component B intensively in KEMPERTEC AC RM reparation fillers component A. KEMPERTEC AC RM reparation fillers immediately apply on the primed substrate.

Once the mixture is ready to use, use a suitable tool, e.g. a smoothing trowel or a spatula, to spread it over the substrate.

PPE

Sufficient ventilation is required. The corresponding instructions should be followed.Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles). We recommend

a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 23 - solvent-based products

Important information

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

When applying KEMPERTEC AC RM reparation fillers explosion protection for working equipment is necessary.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

RMA10

Issued: Vellmar, 2024-03-04

KEMPERDUR CS Microchips

Uses

- For the decorative surface treatment of
  -KEMPERDUR Deko
  -KEMPERDUR Deko 2K
  -KEMPERDUR HB thick coating
  -KEMPERDUR AC-Finish

Characteristics

- Decorative
- Base: PVC and PVA

Pack sizes

1 kg bag

Size of chips: 0,25 -1,4 mm

Shelf Life

Store in a dry environment.

Usage guide

Depending on the chip density, at least 100 g/m²

Properties

Form	solid
Colour	Ready-to-use mix white/ grey/black (1:1:1)

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

The KEMPERDUR CS Microchips are blown onto the KEMPERDUR®products while they are still wet using a chip gun or sprinkled onto the surface by hand.

Personal protective equipment should be worn.

Note

Please consider Technical Information TI 27 - Chips.

Issued: Vellmar, 2024-03-04

KEMPERDUR CL Chips

Uses

- For the decorative surface treatment of
  -KEMPERDUR Deko
  -KEMPERDUR Deko 2K
  -KEMPERDUR HB thick coating

Characteristics

- Decorative
- Slip-reducing
- Base: PVC and PVA

Pack sizes

1 kg

Size of Chips 2 - 5 mm

Shelf Life

Store in a dry environment.

Properties

Form	solid
Colour	White
	black
	light grey

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Usage guide

Depending on the chip density, at least 30 g/m²

CE marking

Component to	ETA 03/0043
	ETA 03/0044

Application

Apply and spread KEMPERDUR surfacings. Use a chip blast gun to blow chips into the fresh coat or scatter them by hand. KEMPERDUR Deko 2K or KEMPERDUR HB thick coating can be sealed after 12 hours and KEMPERDUR Deko after 72 hours with KEMPERDUR Finish. Only apply when the substrate and ambient temperatures are at least +5 °C.

Personal protective equipment should be worn.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERDUR CQ 0408 Colorquarz

Uses

- For new buildings and repair work
- For decorative design of wear layers
  - KEMPERDUR TC coating
  - KEMPERDUR AC coating
  - KEMPERDUR quartz covering made of KEMPERDUR Deko transparent and KEMPERDUR CQ 0408 Colorquarz
- As scatterings
- As a coating for concrete, screed, KEMPEROL waterproofing membranes or existing ceramic coatings

Characteristics

- Lightfast- strong colors
- Resistant to freezing and thawing
- Non-slip

Pack sizes

25 kg bag

Shelf Life

Cool and dry.

CE marking

Component to	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Properties

Colour	anthracite mottled
	grey mottled

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

See Technical information sheet KEMPERDUR Deko transparent and KEMPERDUR® TC.

To avoid colour variations or shading over the surface, material from different bags must be mixed in advance.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERDUR Deko transparent

Uses

- For new buildings and repair work
- In combination with the KEMPERDUR CQ 0408 Colorquarz as KEMPERDUR Quartz covering
- In form of KEMPERDUR quartz covering as non-slip floor covering for:
  - Balconies, terraces and roofs
  - puplic ways
  - pergolas
  - Paths in nursing homes and schools
  - Roof terraces
  - Footbridges
  - Stairs

Characteristics

- UV-resistant
- Lightfast
- 1-component
- Low solvent content
- Dirt repellent
- Resin base: Polyurethane resin

Pack size

5 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

KEMPERDUR Deko transparent as
1.Template for the color quartz spreading of at least 300 g/m²
2nd head sealing after sweeping off the surplus quartz at least 400 g/m².

Properties

Form	Liquid
Colour	Transparent
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 7 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures below 10 °C, up to 250 ml of KEMCO 1K Thinner can be added to the 5 kg container.

For a level surface, we recommend to lay the KEMPEROL waterproofing butt-joined in combination with the KEMCO RS Reinforcement Strip .

Mixing

Open the container and stir the material thoroughly and carefully.

Use as KEMPERDUR Quartz Surfacing

Apply KEMPERDUR Deko transparent to the substrate to be coated, covering the entire surface with at least 300 g/m² and sprinkle KEMPERDUR CQ 0408 Colorquarz or KEMCO Coloured quartz in excess over the entire surface (at least 4 kg/m²). After curing – after 16 hours at the earliest, depending on weather con-

ditions – brush off the excess and seal with KEMPER-DUR Deko transparent over the entire surface with a consumption of at least 400 g/m². The material can be applied with a Perlon roller.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPERDUR MT mineral tile adhesive

Uses

- Adhesive for increased requirements with high-level stability for laying tiles on surfaces with high loads
- Indoor and outdoor
- For walls and floors
- For stoneware tiles
- For the installation of ceramic tiles and slabs, artificial and natural stone by the thin and medium-bed method
- Suitable for all types of ceramic tiles
- For KEMPEROL sealings with appropriate preparation

Characteristics

- Waterproof
- Frost-resistant
- Hydraulic hardening
- Highly flexible
- Suitable for floor heating
- Containing cement
- Base: Portland cement

Pack sizes

25 kg dry mortar in paper bag

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate, on the type of tiles to be installed, on the tool handling and application method (combined method) - Depending on the notch spacing 1.9 - 3,4 kg/m².

The quantities given refer to the dry mortar.

Properties

Form	solid
Colour	Grey
Workability time*	approx. 2 h
Maturing time	approx. 5 min.
Open time	approx. 30 min
Can be walked on after *	approx. 8 h
Available after *	approx. 24 h
Cured after*	approx. 7 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly (e. g. bonding coat).

At the time of processing, all temperatures (air, surface, material and material to be laid) must lie between 5 and 25 °C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

Mixing

KEMPERDUR MT mineral tile adhesive shall be mixed homogenously in a clean container with cold tap water (approx. 6.25 l) without lumps. We recommend a stirring device with 600 revolutions/minute with spiral or double disc stirrer. Briefly stir and apply the fresh mortar after a maturing time of approx. 5 minutes. Observe the adhesion time of the fresh mortar; after skin formation, the mortar shall be removed from the laying surface and fresh mortar shall be combed on again. Expansion joints must not be bridged with mortar.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools wit water immediately after use.

Note

Please observe Technical Information TI 21.

Important notes

The applicable ETAG 022 in its current version as well as the “standard rules of technology” and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing.

Issued: Vellmar, 2024-03-04

KEMCO Decor Stone / Natural Stones

Application area

- For the decorative design/finish of the different surfacing systems for balconies, terraces, walls and floors
- For new buildings and repair work

Features

- Mechanically rounded, natural appearance
- Washed and dried
- Grading curve 2 - 4 mm

Pack sizes

25 kg bag

Storage

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Allow the material to stabilize to between +18°C and +20°C for at least 24 hours prior to use.

Properties

Weight	approx. 2.50 g/cm³, bulk weight 1.7 t/m³

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

To avoid colour variations or shading over the surface, material from different bags must be mixed in advance.

Important note

Please refer to the respective safety data sheet for hazard warnings, protective measures, hazardous substance classes and correct disposal!

Disposal

EAK 17 05 04

Issued: Vellmar, 2024-03-04

KEMCO QB1 Binder

Application area

- Covering for interior areas, covered walkways, balconies and terraces
- For new buildings and repair work
- To produce decorative finishes made of KEMCO Decor Stone / Natural Stones and KEMPERDUR CQ 0408 Colorquarz
- Indoor and outdoor use
- On KEMPEROL waterproofing products

Features

- Solvent-free
- Odourless
- Lightfast
- AgBB-compliant
- Air-humidity cured
- 1 part (single component)
- Weatherproof
- Resin base: Polyurethane resin

Pack size

1.75 kg package

5.25 kg package

Storage

Store unopened in a cool, frost-free and dry place, see label for use before date.

Consumption

7 mass% = 1.75 kg package for 25 kg KEMCO Decor Stone / Natural Stones

Ready-to-use mixture: 18 kg/m² KEMCO Decor Stone / Natural Stones for a layer thickness of 8 mm

10 mass% = 2.50 kg for 25 kg KEMPERDUR CQ 0408 Colorquarz

Ready-to-use mixture: 7 kg/m² KEMPERDUR CQ 0408 Colorquarz for a layer thickness of 3 mm

Properties

Form	Liquid
Colour	transparent yellowish
Workability time*	approx. 45 min
Rainfproof after*	approx. 2 h
Can be walked on after*	approx. 72 h
Cured after *	approx. 3 d
Layer thickness of the finished covering (fleece laid with overlaps)	approx. 8 mm
Layer thickness of the finished covering with Colour Quartz	approx. 3mm
Fire exposure from outside	B_{fl} **, ***
Non-slip class	R9 ***

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** Classification according to DIN EN 13501-1
2006: DIN 4102-14 - Resistance to flying sparks and radiant heat.
*** Checked with KEMCO Decor Stone / Natural Stones

Application

Preparing the substrate

Substrates like concrete, screed or KEMPEROL waterproofing products must be level, dry, firm and free of from any substances which may hinder adhesion. Surfaces must be prepared and primed in line with the manufacturer's guidelines.

In the still fresh KEMCO POX 2K Primer or KEMPERTEC EP5 primer will be ca. 300 g/m² KEMCO NQ 0408 Natural Quartz as a bonding layer is spread.

The still wet KEMPERTEC AC Primer is scattered with at least 2 kg/m² KEMCO NQ 0408 Natural Quartz as a bonding coat in grain-to-grain contact.

Coating requirement

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Optimal processing temperature at > + 10 ° C (air temperature).

High air humidity (>80%) can affect the surface structure.

Mixing

Application with KEMCO Decor Stone / Natural Stones and KEMPERDUR CQ 0408 Colorquarz: After opening the container, stir the binder thoroughly with a wooden stick.

Stir the product KEMCO QB1 Binder with a slow-running positive mixer thoroughly into the KEMCO Decor Stone / Natural Stones until you achieve a homogeneous mixture with the binder and the stones. Mixing time: 5 min; use within 40 min.

To avoid foaming, empty the mixing bucket immediately after the mixing process without leaving any residues. Avoid material accumulation.

Application

Divide larger areas into bays according to the German “Tile-Laying Guidelines”. Expansion joint profile rails are used for this subdivision. Complete each bay in one operation. Spread the prepared mixture evenly over the substrate with a straight-edge, smooth the surface and compact it lightly with a smoothing trowel. Afterwards, smooth the surface evenly again with the smoothing trowel.

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please note the following technical information:

- TI 21 – Substrate Assessment
- TI 24 - Cleaning and maintenance
- TI 29 - Non-slip classes

Important note

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

On surfaces in an exposed position, e. g. in a forest location, or when ponding occurs, with KEMCO Decor Stone / Natural Stones algae growth, soiling or the like are possible.

Wear surfaces are subjected to mechanical stress and therefore require periodic inspection/maintenance. Depending on the degree of wear, a rework may be required.

Surface stickiness may persist for up to three days depending on outside temperature and air humidity.

Disposal

Liquid	EAK 08 05 01
cured	EAK 17 02 03

GISCODE

PU40

Issued: Vellmar, 2024-03-04

KEMPERDUR EP-Finish

Uses

- For new buildings and repair work
- As a sealant on surfaces scattered with KEMCO natural quartz KEMPEROL 2K-PUR waterproofing and on KEMPERDUR TC coating
- Especially for parking decks

Characteristics

- Decorative
- Solvent-free
- 2-component
- Low-yellowing
- Glossy
- Resin base: Epoxy resin

Pack sizes

6 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Can be stored unopened in a cool, dry, frost-free place. Use by: see label on pack. At temperatures below 5 °C, crystallisation may occur. This can be reversed by careful heating (40 °C).

Usage guide

Depending on the nature of the substrate : min. 0,7 kg/ m²

Properties

Form	Liquid
	Comp. B liquid
Standard colour	Stone grey
Special colours	On request
Workability time *	approx. 25 min
Rainproof after*	approx. 24 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 48 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate of the surface to be coated must be dry, firm and free from materials that could reduce the bond.

Coating requirement

Only apply when substrate and ambient temperatures are ≥10°C and at a max. relative air humidity of 75%.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Mixing

Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

For a full-surface sealing, the specified KEMPERDUR EP-Finish have to be distributed evenly across the surface using a rubber squeegee before using a nylon roller for smoothing out in a criss-cross fashion. Avoid material accumulation.

Only use containers with the same batch number in order to avoid differences in colour over one surface.

Weather conditions:

- The product KEMPERDUR EP-Finish must be protected against moisture until it has fully cured (approx. 24 h at 23°C) - otherwise a white and/or sticky film may form on the surface.
- Despite high resistance to yellowing, discolouration or yellowing cannot be fully excluded.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERDUR Finish glossy

Uses

- For new buildings and repair work
- For sealing of chip spread in the case of KEMPERDUR Deko, KEMPERDUR Deko 2K and KEMPERDUR HB thick coating
- For sealing of KEMPERDUR color quartz spreadings
- For sealing of KEMPEROL waterproofings at special constructions

Characteristics

- Lightfast
- 1-component
- Dust repellent - smooth
- Very easy to clean
- solvent-based
- Resin base: Polyurethane resin

Pack sizes

10 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 0,2 kg/m²

Properties

Form	Liquid
Standard colour	Clear
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Filth or contamination of the substrate must be eliminated.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Mixing

Open the container and stir the material thoroughly and carefully.

Application

KEMPERDUR Finish glossy is applied in one operation and spread with a nylon roller to achieve a full covering.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Avoid direct contact with skin.

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPERDUR Finish matt

Uses

- For sealing of chip spread in the case of KEMPERDUR Deko, KEMPERDUR Deko 2K and KEMPERDUR HB thick coating
- For sealing of KEMPERDUR color quartz spreadings

Characteristics

- Silk matt
- Lightfast
- 1-component
- solvent-based
- Resin base: Polyurethane

Pack sizes

4 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate : min. 0,2 kg/m²

CE marking

Component to	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Properties

Form	Liquid
Standard colour	Transparent
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Filth or contamination of the substrate must be eliminated.

Coating requirement

KEMPERDUR Finish mat may only be applied when substrate and ambient temperatures exceed 5°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

Application of KEMPERDUR Finish matt to KEMPERDUR Deko after approx. 3 days on KEMPERDUR Deko 2K and KEMPERDUR HB thick coating after approx. 12 hours

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Mixing

Open the container and stir the material thoroughly and carefully.

Application

To improve the anti-slip classification, KEMPERDUR ASG granulate rh is stirred into KEMPERDUR Finish mat . Apply in one operation with a nylon roller to achieve to cover the entire surface. While the work is in progress regularly stir the mixture in order to prevent the granules from settling.

PPE

For application in enclosed areas ensure there is sufficient ventilation.

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools wit water immediately after use.

Note

Please consider the following technical information:

- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Avoid skin contact.

Please note that certain media (e. g.rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

GISCODE

PU50

Issued: Vellmar, 2024-03-04

KEMPERDUR ASG granulate rh

Uses

- To increase the skid resistance of KEMPERDUR coating systems

Characteristics

- Slip-reducing
- Resin base: Polyolefins

Pack sizes

2,5 kg in a bucket

Shelf Life

Store in a dry environment.

Usage guide

From at least 5 g/m² depending on the desired degree of slipping reduction and type of processing.

CE marking

Component to	ETA 03/0043
	ETA 03/0044

Properties

Form	solid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

The product KEMPERDUR ASG granulate rh must be applied in direct combination with KEMPERDUR Finish matt. To do that, add 40 g of granulate to 4 kg of KEMPERDUR Finish (corresponds to 1% by weight) and stir thoroughly. Afterwards, spread the mixture evenly with a nylon roller.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMPERTEC MA-SF Metal Adhesive

Uses

- for bonding metal profiles and common metals (e.g. made of copper, aluminum, stainless steel, titanium zinc and galvanized steel) to building materials such as sand-lime brick, concrete, aerated concrete, brick, perforated brick, wood, chipboard and OSB boards, KEMPEROL sealant, polymer bitumen sheeting and insulating materials

Characteristics

- UV-resistant
- Cold to process
- Solvent-free
- 1-component
- Ready-to-use
- Base: bitumen emulsion
- Alkali-resistant
- Permanently plastic
- Clean, simple and fast processing
- Can be used with a spatula and stable up to 110°C

Pack sizes

5 kg plastic containers

Shelf Life

Store unopened in a cool, dry, frost-free place. Minimum storage life:12 months

Consumption

Depending on the character of the substrate: min. 1.5 kg/m².

Toothing in mm	Consumption kg/m²	Loadable after h
4	1.50	2.0
6	1.75	2.5
8	2.0	3.0

Consumption may increase due to craftsmanship, different substrates and toothing of the filler during application. However, the consumption must not exceed 3.0 kg/m².

Properties

Colour	black
Workability time*	approx. 30 min
Temperature during application and complete drying***	+5 to + 50°C
Can withstand loads after *	approx. 2 - 3 h
Final hardness after *	approx. 14 days

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
*** Temperature, part, installation and ambient temperatures

Application

Preparing the substrate

The substrate must be dry, level, load-bearing, frost-free, clean and free of oil, grease, tar, gravel pockets, cracks, dust, dirt, mortar residues and other impurities.

KEMPERTEC MA-SF metal adhesive can be applied directly to clean and solid substrates. Sanding, highly absorbent and open-pored substrates such as perforated bricks (Poroton), old cementitious or natural stone surfaces must be pretreated e.g. with the KEMPERTEC TG Primer after removing loose particles and dust.

Larger unevenness (>3mm) should be leveled with suitable materials before applying the KEMPERTEC MA-SF metal adhesive. KEMPEROL sealants, unsplit elastomeric membranes and insulating materials must be cleaned with suitable agents, primed with a solvent-free 2-component primer, e.g. with KEMPERTEC EP5 primer and scattered with KEMCO NQ 0712 before applying the metal adhesive. Before bonding the metal profiles, they must be cleaned of oils, greases and adhesion-reducing substances with KEMCO MEK Cleaning Agent and roughened with a P40 grit sanding sheet to avoid adhesion problems.

Application

The product KEMPERTEC MA-SF Metal Adhesive is ready to use and is taken directly out of the container with a trowel.

The material is applied with the KEMPERTEC professional toothed spatula evenly, parallel and over the full surface in the longitudinal direction of the metal over the entire surface to be bonded in the required layer thickness. Make sure to keep a distance of approx. 2

cm to the edge to prevent run-off beyond the edge. For components to be bonded in inclined (> 3°) or vertical areas, additional mechanical fixation is necessary.

If metal is to be bonded to metal (maximum overlap approx. 5 cm), the metal parts must be secured against shifting, e.g. by implementing mechanical fixation. Bonding should be carried out within 30 minutes. Press down the metal profiles thoroughly and evenly.

Take care to apply the metal adhesive over the entire surface. The material should not extend beyond the metal/sheet to be bonded into the visible area, as otherwise yellowish discolouration may occur with subsequent primers, waterproofing products or coatings.

Areas which are not to be bonded should be masked off or protected.

Please observe the data sheet “Kleben in der Klempnertechnik” (Bonding in plumbing).

PPE

Personal protective equipment should be worn.

Important notes

The freshly applied material must be protected against rain, frost and strong sunlight until completely dry.

After removing the metal adhesive, the container has to be carefully closed in order to prevent a skin from forming. Should a skin have formed, remove it before using the material.

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KEMPERTEC KR Quartz Sand Mixture

Uses

- As a repair mortar or scraper filler in combination with the KEMPERTEC EP Primer, KEMPERTEC EP5 primer or the KEMPERTEC AC Primer
- For re-profiling
- As a coating for concrete, screed or existing ceramic coatings
- For new buildings and repair work

Characteristics

- System-tested and matched to the application purpose
- dust-reduced

Pack sizes

25 kg bag

Shelf Life

Cool and dry.

Usage guide

Per mm of layer thickness: at least1,5 kg/m².

Properties

Form	Granular /solid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

Substrates must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Use as a filling compound

For processing as a scratch filler, the KEMPERTEC KR Quartz Sand Mixture can be mixed in a ratio of approx. 1:2 with the KEMPERTEC EP5 primer or in a ratio of approx. 1:3 with the KEMPERTEC AC Primer . This ratio may be varied depending on the particular application and the ambient conditions.

Use as a repair mortar

The surfaces must be prepared accordingly and primed with KEMPERTEC EP5 primer or KEMPERTEC AC Primer as well. To compensate for unevenness up to 20 mm and breakouts, the KEMPERTEC KR Quartz Sand Mixture is mixed in a ratio of approx. 1:5 with the KEMPERTEC EP5 primer or in a ratio of approx. 1:10 with the KEMPERTEC AC Primer .

This ratio may be varied depending on the particular application and the ambient conditions.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMCO 1K Thinner

Uses

- For the use in KEMPEROL 1K-PUR waterproofing, KEMPERDUR Deko and KEMPERDUR Deko transparent at low processing temperatures (between +10 °C and +5 °C)
- As a liquid lid on opened containers of KEMPEROL 1K-PUR, KEMPERDUR Deko and KEMPERDUR Deko transparent
- Designed for horizontal surface features

Characteristics

- Optimizes processing at low ambient temperatures
- Combination of organic solvents

Pack sizes

500 ml in container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
Colour	Clear

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Usage guide

125 ml to maximum 250 ml for a 7 kg container of the KEMPEROL 1K-PUR waterproofing;

250 ml to maximum 500 ml for a 15 kg container of the KEMPEROL 1K-PUR waterproofing;

500 ml to maximum 1,000 ml for a 25 kg container of the KEMPEROL 1K-PUR waterproofing;

maximum 250 ml for a 6 kg container KEMPERDUR Deko;

maximum 250 ml for a 5 kg container KEMPERDUR Deko transparent.

CE marking

Component to	ETA 03/0043

Application

At low ambient temperatures (+10 °C to +5 °C) the KEMCO 1K Thinner the KEMPEROL 1K-PUR waterproofing or KEMPERDUR Deko or KEMPERDUR Deko transparent must be added before processing and mixed well.

Personal protective equipment should be worn.

Important notes

The safety data sheets, the labeling of the containers, the hazard warnings and the safety instructions on the containers must be observed during transport, storage and processing. The BG-Chemie data sheets must be observed during processing.

Do not allow to enter waters, drains or to penetrate the ground.

Disposal

Dispose of in accordance with the official regulations. Further information on disposal can be found in the respective safety data sheets, Section 13.

Issued: Vellmar, 2024-03-04

KEMCO MEK Cleaning Agent

Application area

- Cleaning agent for the cleaning of existing KEMPEROL surfaces after work breaks or longer interruptions.
- To clean working equipment
- To clean substrates
- To degrease metals

Features

- Highly effective
- Highly volatile
- Organic solvent
- System-tested and adapted to the intended purpose

Storage

Cool and dry.

Pack size

2,7 l, 10 l and 27 l metal container

Consumption

depending on the degree of soiling, at least 200 g/m².

Properties

Form	Liquid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Apply on KEMPEROL surfaces or dirty surfaces with a cloth moistened with KEMCO MEK Cleaning Agent while avoiding the formation of puddles, remove impurities and immediately wipe up the KEMCO MEK Cleaning Agent completely again. Let the solvent of the KEMCO MEK Cleaning Agent evaporate sufficiently before you continue coating.

PPE

Personal protective equipment must be worn.

When applying the product in closed rooms, sufficient ventilation is necessary!Caution: explosion hazard!

Important note

KEMCO MEK Cleaning Agent must only be used according to its intended use as a cleaning agent for surfaces and tools.

Caution: may result in dissolving plastic surfaces (acrylic glass etc.)!

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

Do not allow to enter waters, waste water or soil.

Disposal

liquid	EAK 07 07 04

GISCODE

GF0

Issued: Vellmar, 2024-03-04

KEMCO NQ 0408 Natural Quartz

Application area

- For new buildings and repair work in combination with KEMPERTEC, KEMPEROL and KEMPERDUR
- To create a bonding bridge with the primers:
  - KEMPERTEC EP5 primer
  - KEMCO 1K Primer
  on concrete, screed or waterproofings (see primer recommendations)
- As a scattering for primers
- To be scattered in KEMPERDUR TC coating
- Indoor and outdoor use

Features

- Kiln-dried
- Grading curve that is adapted to the intended purpose and compatible with the system

Pack sizes

25 kg bag

Storage

Cool and dry.

Consumption

In order to create a bonding bridge: at least 2 kg/m²

For spreading in the primer: at least 2 kg/m²

For spreading in the KEMPERDUR® TC: at least 3-5 kg/m²

Properties

Form	Granular /solid

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 4	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Use as a bonding coat

Substrates like concrete, screed or KEMPEROL waterproofings must be level, dry, firm and free of from any substances which may hinder adhesion. The surfaces must be prepared accordingly and primed with KEMPERTEC EP5 primer as well. Scatter approx. 2 kg/m² of KEMCO NQ 0408 Natural Quartz into the still wet primer as a bonding coat. As a bonding coat on KEMPEROL Waterproofing systems for the subsequent KEMCO Decor Stone / Natural Stones also KEMCO 1K Primer can be used.

As scattering

See technical data sheet KEMPERDUR TC coating resp. the data sheet of the respective primer.

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Disposal

EAK 17 05 04
No hazardous waste, disposal as domestic waste.

Issued: Vellmar, 2024-03-04

KEMCO NQ 0712 Natural Quartz

Application area

- For new buildings and repair work in combination with KEMPERTEC, KEMPEROL and KEMPERDUR
- To create an alkali protection with the primers:
  - KEMPERTEC AC Primer,
  - KEMPERTEC EP5 primer
- To be scattered in KEMPERDUR TC coating
- Indoor and outdoor use

Features

- Kiln-dried
- Grading curve that is adapted to the intended purpose and compatible with the system

Pack sizes

25 kg bag

Storage

Cool and dry.

CE marking

Component to 4	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Consumption

As alkaline protection layer: at least 1.5 kg / m²

In KEMPERDUR TC coating: at least 4 kg / m²

Application

As scattering

See technical data sheet KEMPERDUR TC coating resp. the data sheet of the respective primer.

Application as alkaline protection

To protect the KEMPEROL waterproofings from alkaline media, they are coated with a coat of KEMPERTEC EP5 primer or KEMPERTEC AC Primer according to TI 15 - Alkalinity. The still fresh layer is KEMCO NQ 0712 Natural Quartz scattered with a covering layer of grain on grain (consumption at least 1.5 kg/m²).

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Disposal

EAK 17 05 04
No hazardous waste, disposal as domestic waste.

Issued: Vellmar, 2024-03-04

KEMCO FL Special Filler

Application area

- As filling compound in combination with KEMCO POX 2K Primer

Features

- Grading curve 0.1 - 0.5 mm
- Kiln-dried

Pack sizes

7.5 kg container

Storage

Cool and dry.

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Consumption

Depending on requirements and field of application.

For further information on application, please refer to the separate technical data sheets and the application instructions.

Disposal

EAK 17 05 04

Issued: Vellmar, 2024-03-04

KEMCO TX Thixotropic Additive

Application area

- As adjusting agent (thixotropic agent) for KEMPEROL 2K-PUR waterproofing and KEMPERTEC EP5 primer
- As adjusting agent (thixotropic agent) for the coating systems KEMPERDUR AC coating and KEMPERDUR® TC In case of a slope of 3 - 20 %
- As a thixotropic agent for the surfacing system KEMCO Decor Stone / Natural Stones and for vertical application.

Features

- Improvement of the resistance of the coating systems KEMPERDUR AC and KEMPERDUR® TC for inclined surfaces
- Reduces self-levelling and prevents running on ramps and inclined surfaces

Pack sizes

4 * 150 g-bags

Storage

Cool and dry.

Consumption

The consumption depends on:

- Degree of slope/gradient
- Condition of the substrate
- Temperature

Properties

Form	Powder

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

for KEMPERDUR AC coating

pack	Slope	Quantity	thixotropic agent
33 kg	3 - 5 %	0.1 mass%	for comp. A (approx. 10 g)
33 kg	5 - 7 %	0.2 mass%	for comp. A (approx. 20 g)
33 kg	7 - 10 %	0.3 mass%	for comp. A (approx. 30 g)
33 kg	11 - 20 %	0.6 mass%	for comp. A (approx. 60 g)

For KEMPERDUR TC coating

pack	Slope	Quantity	thixotropic agent
20 kg	3 - 20 %	2 mass%	for comp. A (approx. 150 g)
12.5 kg	3 - 20 %	2 mass%	for comp. A (approx. 90 g)

For KEMCO Decor Stone / Natural Stones

pack	Quantity thixotropic agent
1,75 kg KEMCO QB1 Binder	8 mass%

For KEMPEROL 2K-PUR waterproofing

pack	Slope	Quantity	thixotropic agent
12.5 kg	vertical	1.25 mass%	approx. 150 g

For KEMPERTEC EP/ EP5 Primer

pack	Slope	Quantity	thixotropic agent
10 kg	vertical	4.5 mass%	approx. 3 * 150 g
3 kg	vertical	5 mass%	approx. 150 g

Application

When adding KEMPERDUR AC coating:

After determining the required amount, the KEMCO TX Adjusting agent is stirred well with a slow-running agitator in the component A of the KEMPERDUR AC coating stirred well. After that, the KEMPERDUR AC filler (component C) should be added and the mixture must be repotted. After repotting, the corresponding quantity KEMPEROL CP catalyst powder (See Technical information sheet KEMPERDUR AC coating) is stirred well in the mass.

When adding KEMPERDUR TC coating:

Depending on the size of the working package, the required quantity of KEMCO TX Adjusting agent is stirred well using a slow-moving stirrer into component A of the KEMPERDUR TC coating stirred well. Then add component B and transfer the mixture into a new container. Then add component C and mix thoroughly once more.

PPE

Personal protective equipment must be worn.

Especially when working with the thixotropic additive, we recommend that you use a dusk mask.

Note

Please observe the Technical Information TI 30 - Application of KEMPEROL on vertical surfaces.

Important note

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

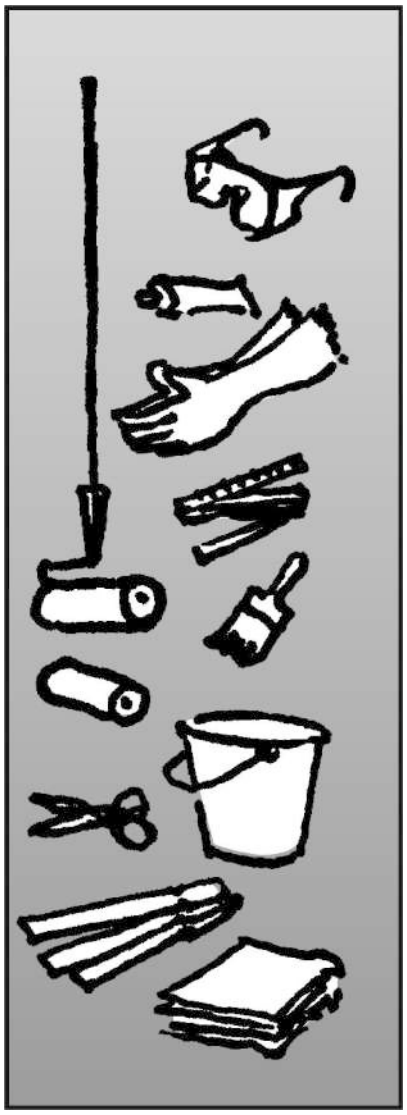
Do not allow to enter waters, waste water or soil.

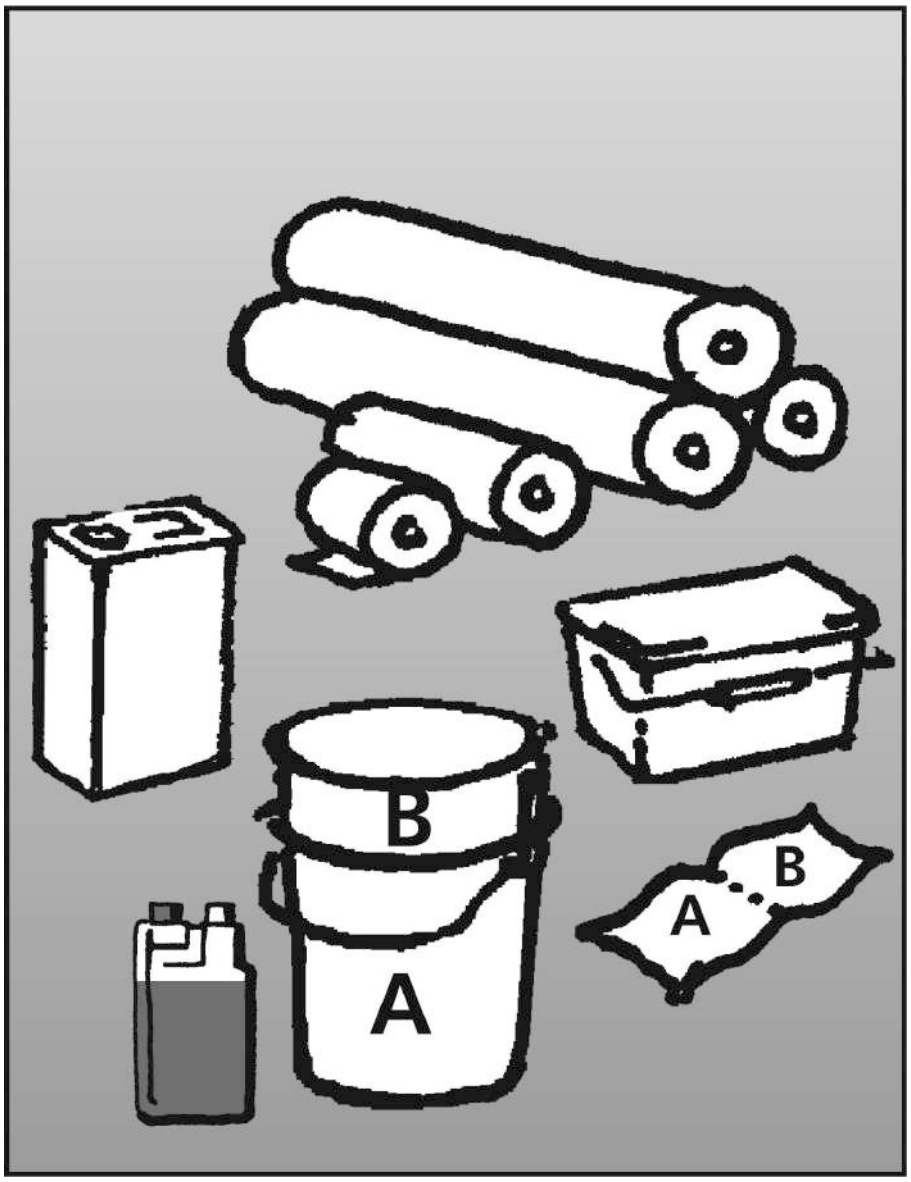
Disposal

EAK 17 05 04

Issued: Vellmar, 2024-03-04

Instruction of Use KEMPEROL 2K-PUR





Safety glasses.
gloves, folding ruler,
nylon roller with handle,
special brush, scissors,
mixing container, stirring sticks,
cloth

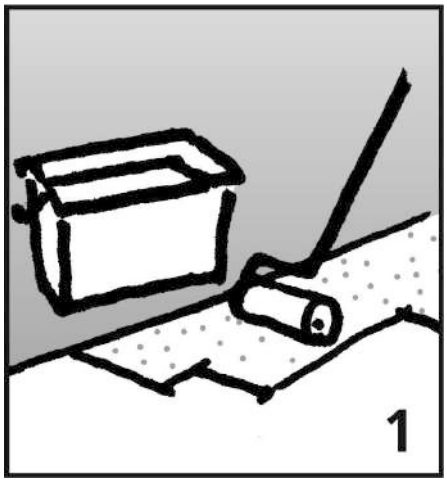
KEMPEROL 2K-PUR Containers with comp. A and B,
(KEMPEROL 2K-PUR Speedshot),
KEMPERTEC primer according to primer recommendation,
KEMPEROL nonwoven fabric,
KEMCO MEK Cleaning Agent

Substrates

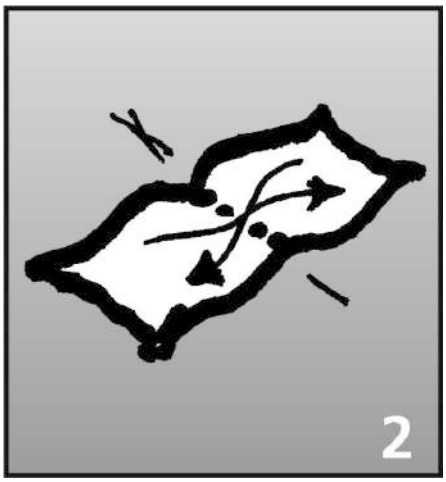
must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

Priming

Prime as per priming recommendations.Please observe the dew point!

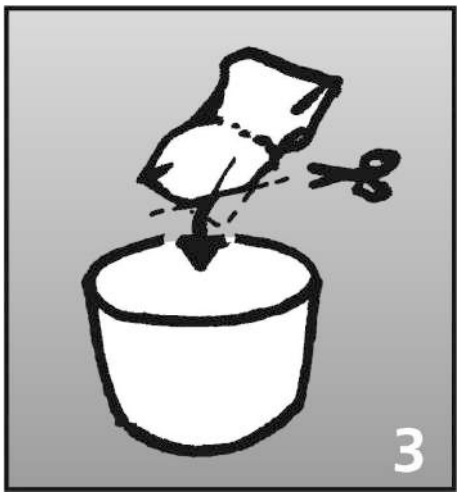


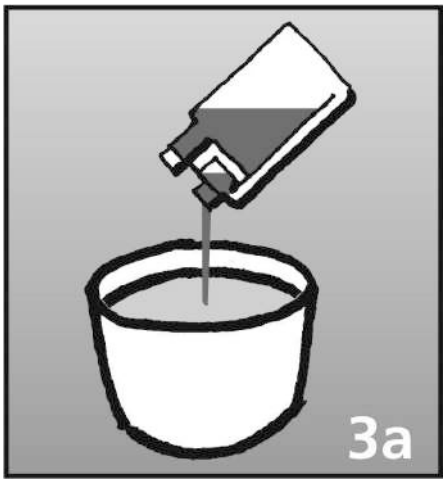
Absorbent substrates must be pretreated with a 2-component KEMPERTEC primer. Non-absorbent substrates do not require priming, except in the connection area. Adjacent parts must be masked and protected KEMPEROL 2K-PUR from contact.



Waterproofing in sachet

The KEMPEROL 2K-PUR waterproofing knead thoroughly in the kneading bag according to the instructions for use and transfer the seal to a separate container.

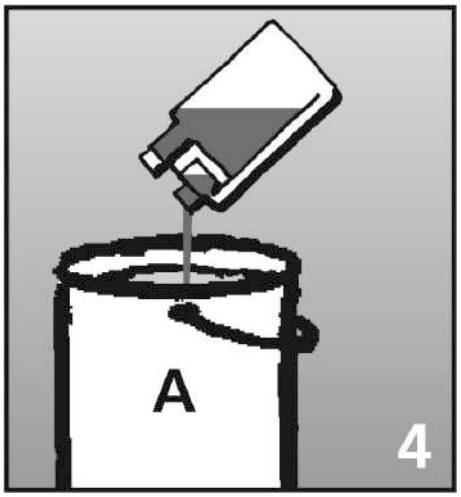




Temperature

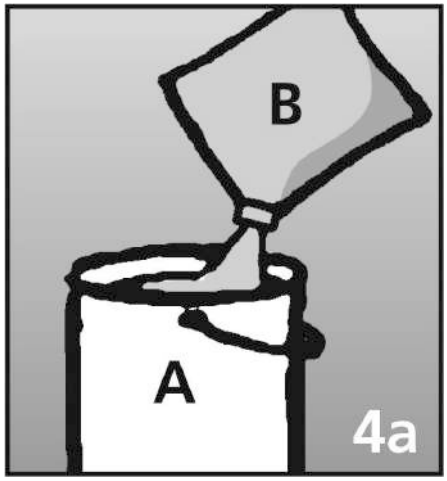
Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

At temperatures below +10 °C, add to the sealant mixture or component A KEMPEROL 2K-PUR Speedshot (see 3a/4).



Waterproofing in container

Add component B (hardener) to component A.Scrape out the component B container until it is completely empty and mix both components thoroughly to obtain a streak-free mixture free of bubbles.



New container

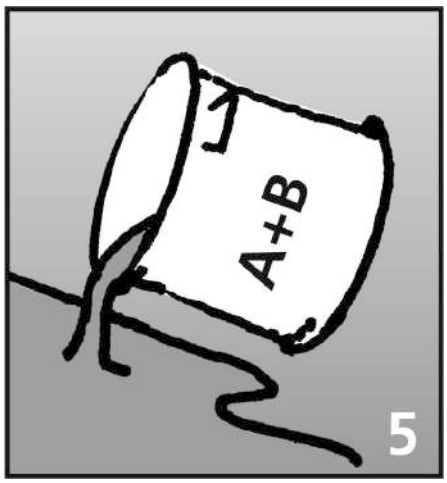
To avoid mixing errors, transfer to a different container and mix again with a slowly rotating mixer for approx. 1 min.

First layer

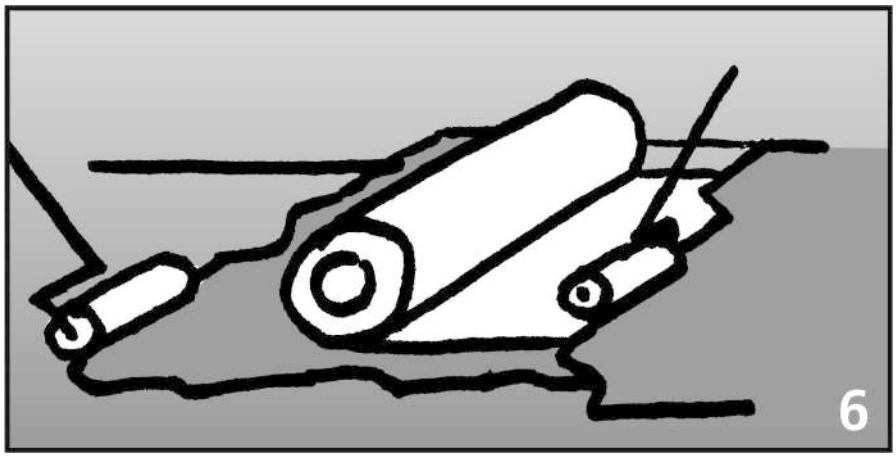
approx. 2/3 KEMPEROL 2K-PUR waterproofing onto the surface and roll out evenly with the Perlon roller.

Fleece

The KEMPEROL non-woven fabric is applied directly into the liquid KEMPEROL 2K-PUR - template rolled with 5 cm overlap.



In case of subsequent coating with KEMPERDUR products, the KEMPEROL non-woven fabric should be applied with the help of the KEMCO RS Reinforcement Strip be laid on a joint.



Second layer

Roll on KEMPEROL Vlies without bubbles. With approx. 1/3 KEMPEROL 2K-PUR waterproofing resoak wet in wet until saturation. Avoid excess material.

Alkaline protection

applied to the sealant and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15 - Alkalinity).

The waterproofing is only conditionally resistant to alkalis. Therefore, if long-term exposure is expected KEMPERTEC EP5 primer or KEMPERTEC AC Primer

Important:

Personal protective equipment (PPE)

must be worn!

Note:

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap, connections and joints

to third party products have to be produced with an overlap of at least 10cm.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

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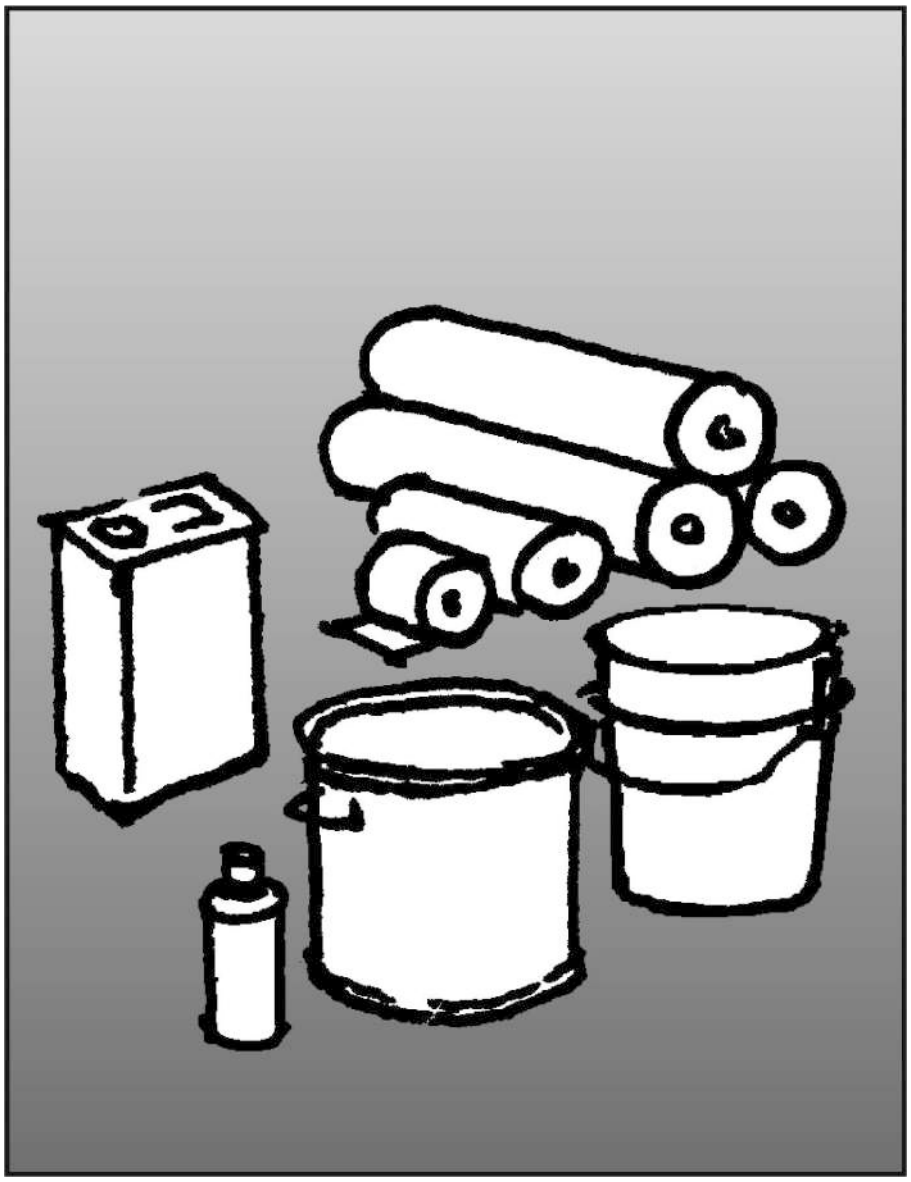
Instruction of Use KEMPEROL 1K-PUR



Safety glasses, gloves, folding rule, Perlon roller with handle, special brush, cleaning cloth, scissors, stirring sticks

KEMPEROL 1K-PUR waterproofing,
(KEMCO 1K Thinner),
KEMPERTEC primer according to primer recommendation,
KEMPEROL nonwoven fabric,
KEMCO RS Reinforcement Strip,
KEMCO MEK Cleaning Agent

Substrates

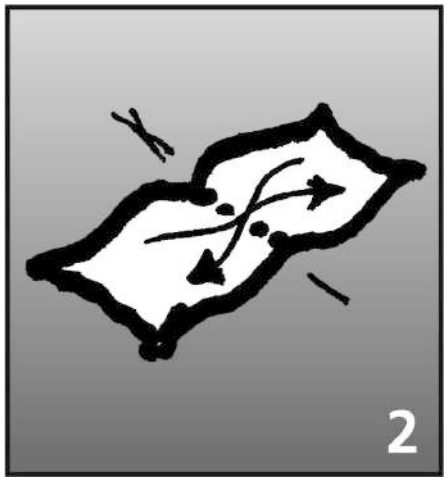
must be level, capable of withstanding loads, dry (residual moisture in the upper 2 cm of concrete < 5%), free of loose parts, dust and grease, i.e. free from materials that may hinder adhesion.

Pre-treat the substrate as per the priming recommendations.

Level out any unevenness according to the manufacturer's instructions. Adjacent parts must be masked and protected KEMPEROL 1K-PUR from contact.

Primer (sachet)

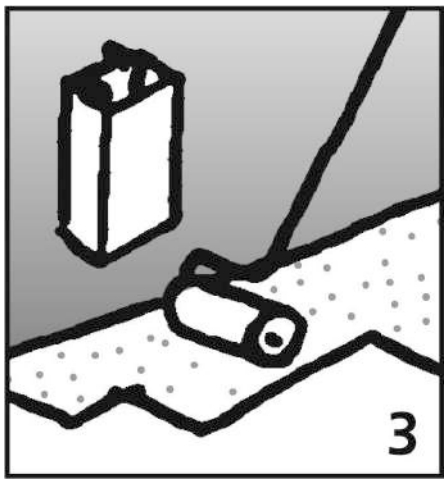
Thoroughly knead KEMPERTEC Primer in the kneading bag according to the instructions for use, cut off one corner and apply KEMPERTEC Primer to the surface and work quickly.



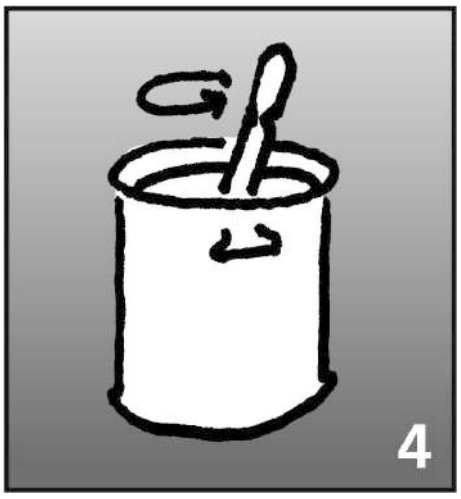
Primer (container)

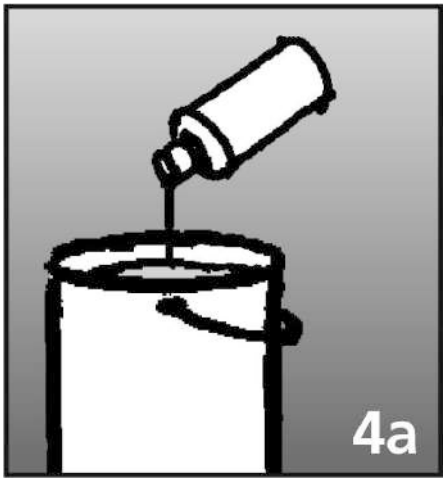
KEMPERTEC Primer in container (without fig.): Comp. Stir A thoroughly. Comp. Mix B with a stirring rod intensively without streaks or bubbles into comp. Mix in A.

KEMCO 1K Primer: Open the canister and apply the primer.



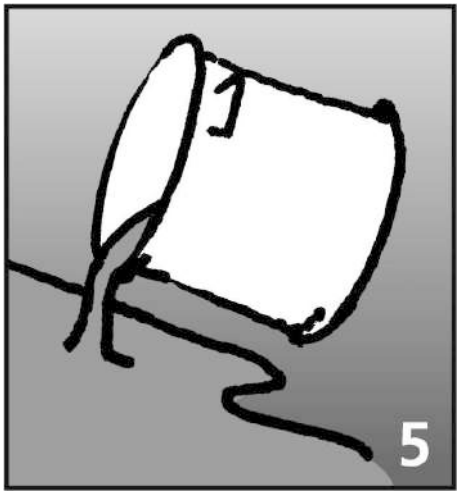
KEMPEROL 1K-PUR waterproofing Stir with a wooden stirring rod so that there are no streaks. A uniform color tone is created (remove skin formation).





Temperature

Seal only at substrate temp. above +5 °C! Observe the dew point! At low temperatures (+10 °C to + 5 °C) KEMCO 1K Thinner add, if necessary.

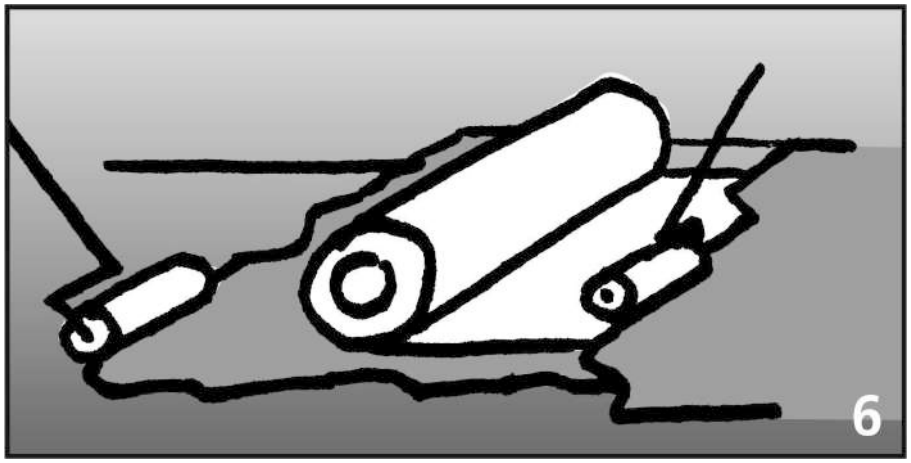


First layer

approx. 2/3 KEMPEROL 1K-PUR onto the surface and roll out evenly with the Perlon roller.

Fleece

The KEMPEROL non-woven fabric is applied directly into the liquid KEMPEROL 1K-PUR The template is rolled up with an overlap of 5 cm.



In case of subsequent coating with KEMPERDUR products, the KEMPEROL non-woven fabric should be applied with the help of the KEMCO RS Reinforcement Strip be laid on a joint.

Second layer

Roll on KEMPEROL Vlies without bubbles. With approx. 1/3 KEMPEROL 1K-PUR waterproofing re-soak wet in wet until saturation. Avoid excess material.

Alkaline protection

The waterproofing is only conditionally resistant to alkalis. Therefore, in case of expected long-term exposure as alkali protection after 7 days lying time KEMPERTEC EP5- or KEMPERTEC AC Primer applied to the sealant and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15 - Alkalinity).

Important:

Personal protective equipment (PPE)

must be worn!

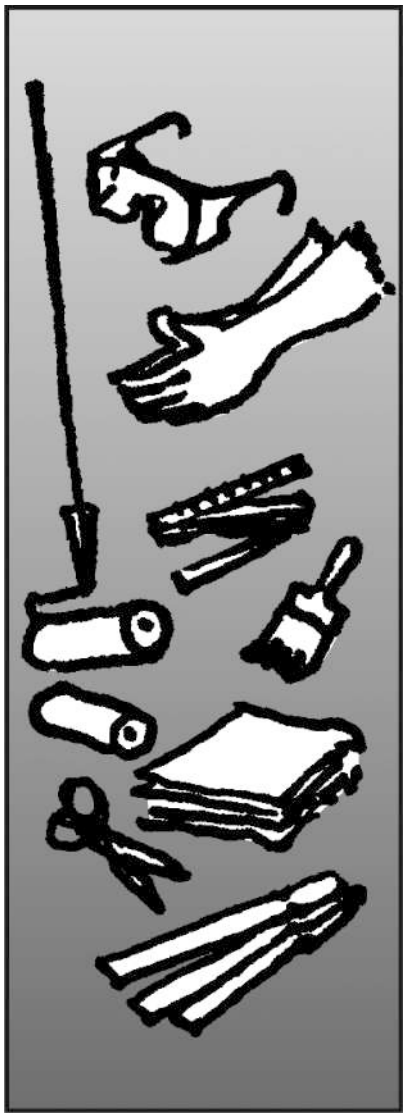
Note:

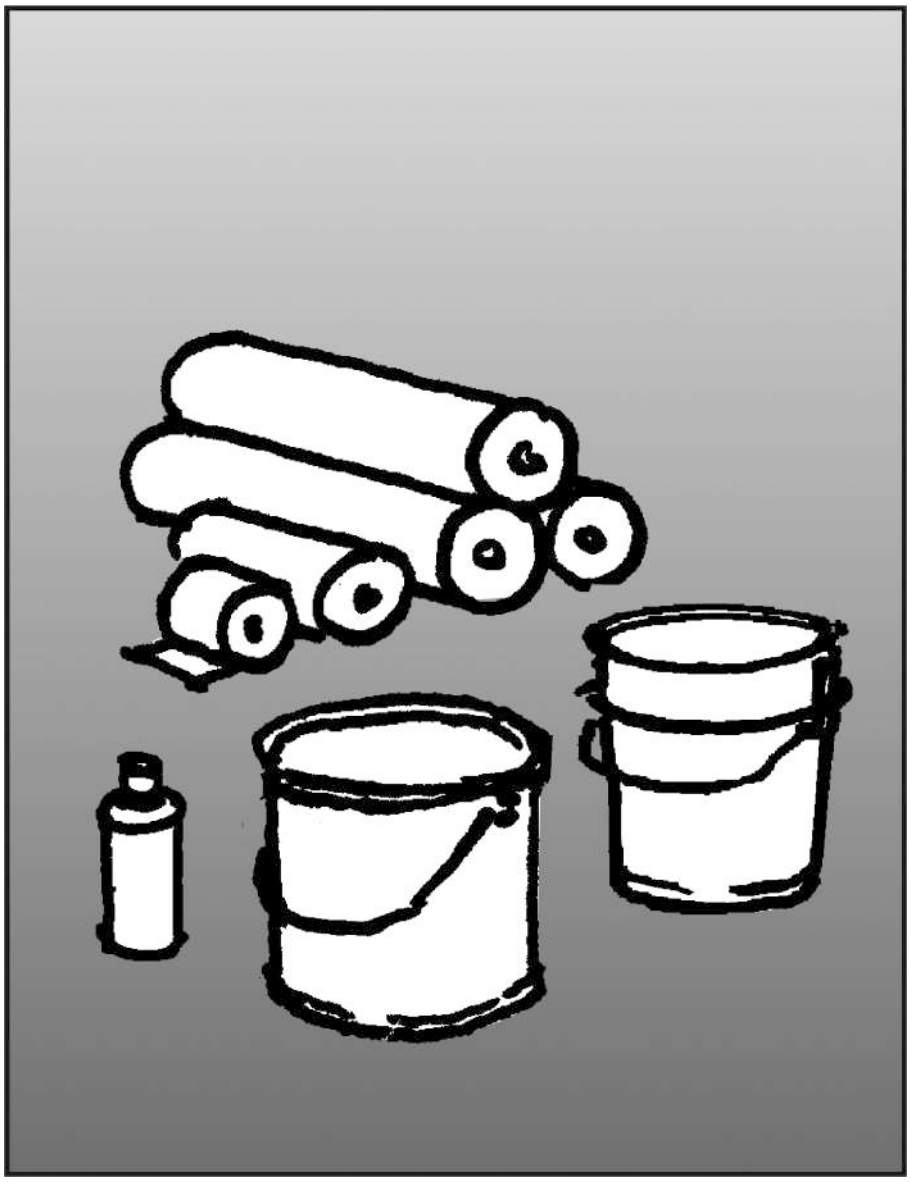
Connections with door and window elements etc. < 15 cm above the water run-off level must have a skirting at least 5 cm high, connections with the waterproofing membrane should be made with at least 10 cm of overlap.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Issued: Vellmar, 2024-02-29

Instruction of Use KEMPEROL 1K-SF





Goggles, gloves, folding ruler, nylon roller with handle, special brush, cloth, scissors, stirring sticks

KEMPEROL 1K-SF,
KEMPERTEC primer according to primer recommendation,
KEMPEROL 165 fleece,
KEMCO MEK Cleaning Agent

Substrates

must be level, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

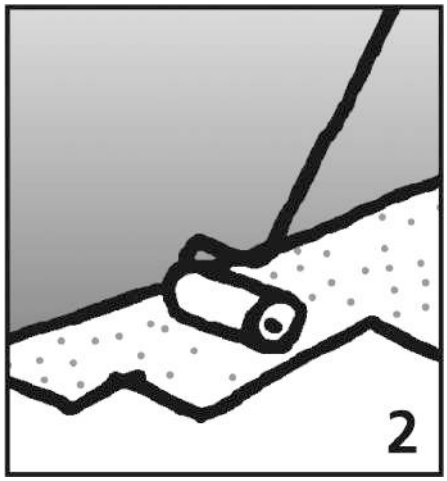
Due to the moisture tolerance of the material, KEMPEROL 1K-SF it can be processed on matt damp substrates.

Pre-treat substrates according to the Technical Data Sheet.

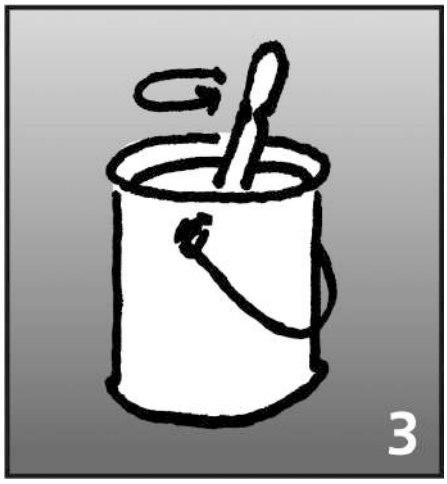
Level out any unevenness according to the manufacturer's instructions. Adjacent parts must be masked and protected KEMPEROL 1K-SF from contact.

Priming

For some substrates, priming may not be necessary. In general, the primer recommendation for KEMPEROL 1K-SF must be taken into account.

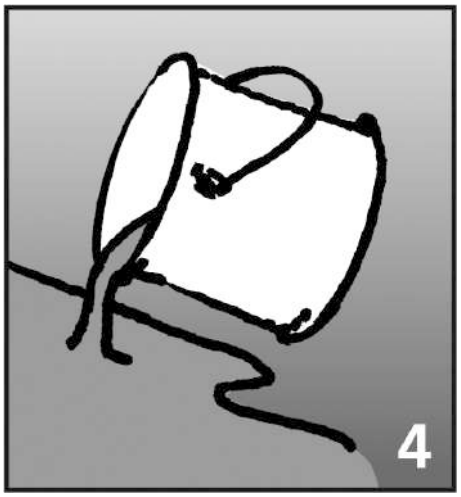


KEMPEROL 1K-SF Stir with a wooden stirring rod so that there are no streaks. A uniform color tone is created (remove skin formation).



Temperature

Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

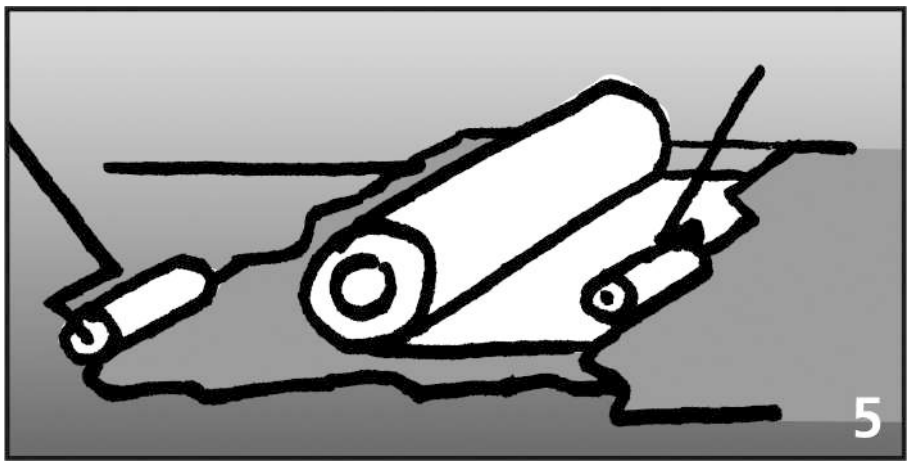


First layer

approx. 2/3 KEMPEROL 1K-SF onto the surface and roll out evenly with the Perlon roller.

Fleece

The KEMPEROL 165 fleece is rolled directly into the liquid KEMPEROL 1K-SF template with 5 cm overlap.



Second layer

KEMPEROL 165 fleece roll on without bubbles. With approx. 1/3 KEMPEROL 1K-SF re-soak wet in wet until saturation. Avoid excess material.

Note:

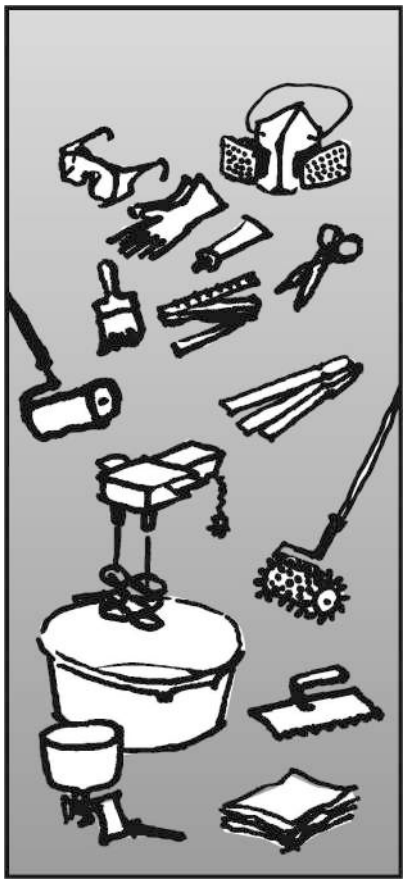
Connections to door and window elements etc. with a height of <15cm (from upper edge of the coating) should have at least 5cm of overlap. Connections to the surface sealant and third party products should be made with at least a 10cm of overlap.

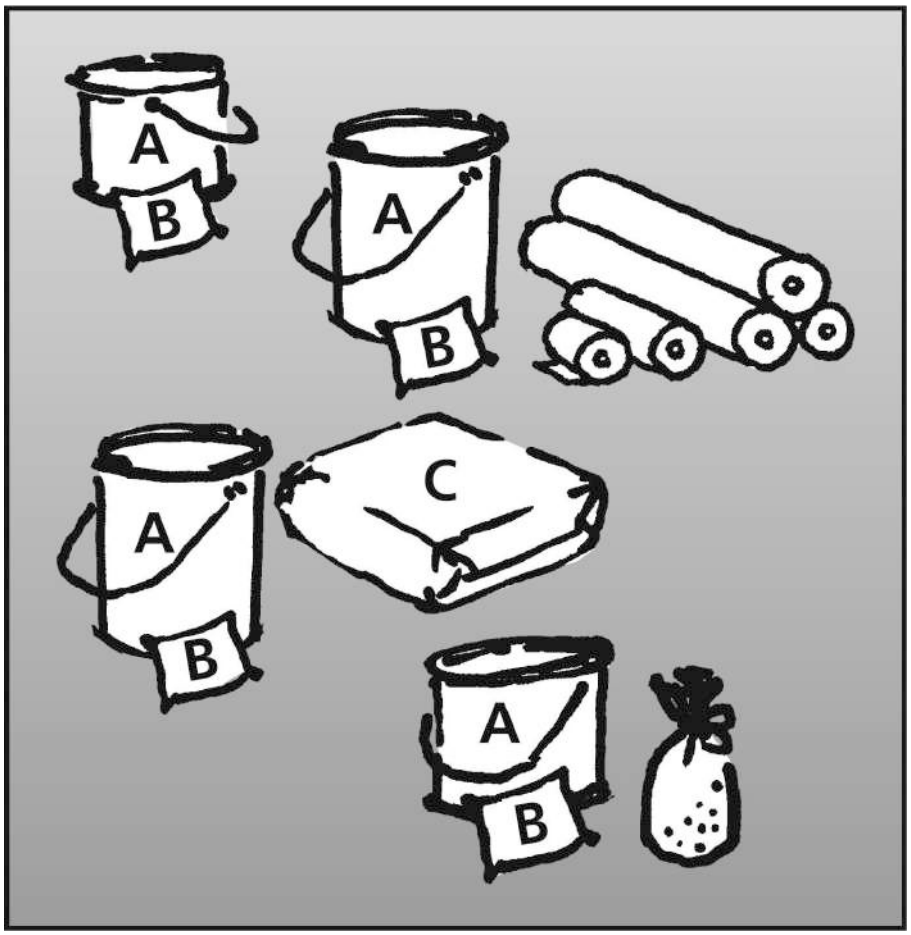
In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Important: Personal protective equipment must be worn!

Issued: Vellmar, 2024-02-29

Instructions for use KEMPERTEC, KEMPEROL and KEMPERDUR AC products





Goggles, breathing mask with A2 filter, gloves, scissors, wooden stirring sticks, spiked roller, nylon roller, ruler, special brush, positive mixer, mortar drum, 8 mm notched trowel, chip gun, cleaning cloths

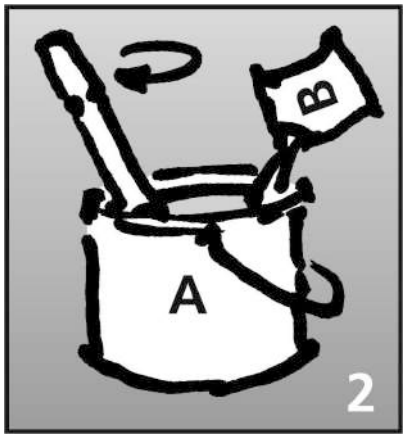
KEMPERTEC AC Primer / KEMPERTEC AC M-Primer (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPEROL AC Speed /AC Speed+ (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPEROL 165 fleece,
KEMPERDUR AC coating (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPERDUR AC filler (component C),
KEMPERDUR AC-Finish (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPERDUR CS Microchips

KEMPERTEC AC Primer

Substrates

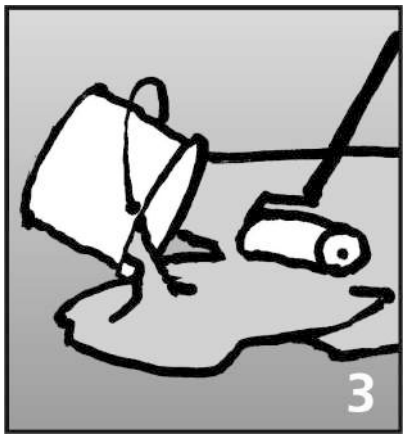
must be level, capable of withstanding loads, dry (residual moisture in the upper 2 cm of concrete < 5%), free of loose parts, dust and grease, i.e. free from materials that may hinder adhesion. Pay special attention to the dew point!

In the event of work interruptions longer than 24 h, all joint areas must be cleaned with KEMCO MEK Cleaning Agent. Mask off adjoining areas and protect them against contact with KEMPEROL AC Speed .



Mixing

The KEMPERTEC AC Primer / KEMPERTEC AC M-Primer may only be used with KEMPEROL CP catalyst powder. The amount of hardener added must be adapted to the respective material temperature (see table: KEMPERTEC AC Primer / KEMPERTEC AC M-Primer). Stir briefly and thoroughly and put in another container.

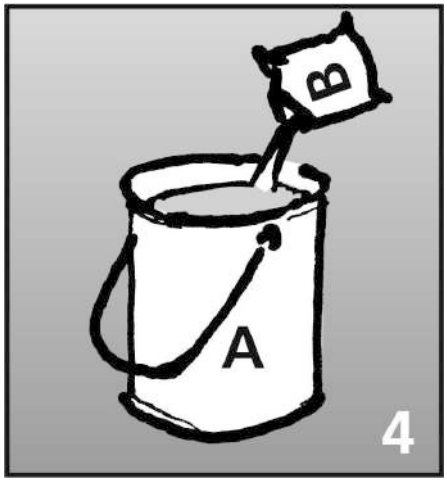


Application

The KEMPERTEC AC Primer / KEMPERTEC AC M-Primer must be evenly distributed on the surface immediately after mixing with KEMPEROL CP catalyst powder . Apply primming in one operation, with a Perlon roller or rubber slider, up to saturation. When using a rubber slider, it is essential to re-roll with the Perlon roller to avoid material accumulation. The consumption must not exceed 750 g/m^2

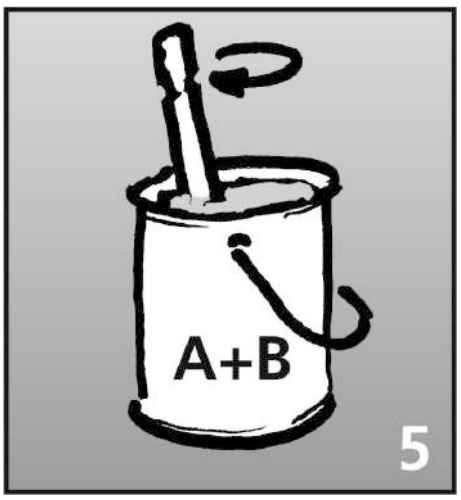
Materialtemperature [°C]	Quantity to be added KEMPEROL CP catalyst powder				KEMPERTEC AC Primer / KEMPERTEC AC M-Primer	
	20 g bags to 1 kg	100 g bag to 5 kg	100 g bag to 20 kg	in %	Pot life in container [min.]	Surface cured [min.]
- 5	2 bags	2 bags	8 bags	4 %	25	60
0	2 bags	2 bags	8 bags	4 %	20	50
+ 5	2 bags	2 bags	8 bags	4 %	18	45
+ 10	2 bags	2 bags	8 bags	4 %	15	30
+ 20	1 bags	1 bag	4 bags	2 %	15	30
+ 30	1/2 bags	1/2 bag	2 bags	1 %	10	15

KEMPEROL AC Speed for surfaces / AC Speed⁺ waterproofing for connections

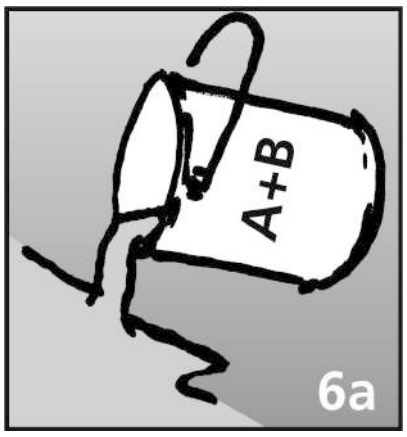


Mixing

KEMPEROL AC Speed / AC Speed⁺ must only be used in combination with KEMPEROL CP catalyst powder. Adjust the quantity of catalyst added to suit the respective material temperature (see table below). Stir briefly but thoroughly and pour the mixture into a new container.



Materialtemperature [°C]	Quantity to be added KEMPEROL CP catalyst powder			KEMPEROL AC Speed / AC Speed⁺ Waterproofing	
	100 g bag to 15 kg KEMPEROL AC Speed	100 g bag for 10 kg KEMPEROL AC Speed⁺	in %	Pot life in container [min.]	Surface cured [min.]
- 5	6 bags	4 bags	4 %	60	90
0	6 bags	4 bags	4 %	45	80
+ 5	6 bags	4 bags	4 %	35	70
+ 10	6 bags	4 bags	4 %	30	60
+ 20	3 bags	2 bags	2 %	20	35
+ 30	1 1/2 bags	1 bags	1 %	20	30



Application surface

KEMPEROL AC Speed must be applied immediately after mixing with KEMPEROL CP catalyst powder.

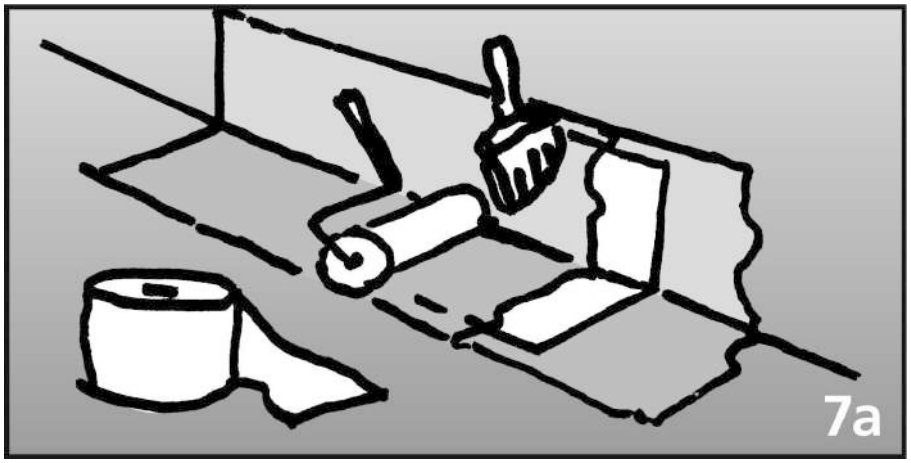
KEMPEROL AC Speed is applied evenly as a first layer using a nylon roller or special brush. KEMPEROL 165 fleece is rolled out and embedded in the resin, taking care to remove any creases and air bubbles. Apply more resin until complete saturation of the fleece. The fleece is rolled directly into the liquid KEMPEROL AC Speed with a 5 cm overlap. Ratio of initially and subsequently applied material: 2/3 to 1/3.

Consumption: at least 2.5 kg / m².

Application connections

KEMPEROL AC Speed⁺ has a higher viscosity. Therefore, it is particularly suitable for the safe waterproofing of connections and details.

KEMPEROL AC Speed⁺ must be applied immediately after mixing with KEMPEROL CP catalyst powder.



KEMPEROL AC Speed⁺ is applied evenly as a first layer using a nylon roller or special brush.

KEMPEROL 165 fleece is rolled out and embedded in the resin, taking care to remove any creases and air bubbles. Apply more resin until complete saturation of the fleece.

Ratio of initially and subsequently applied material: 2/3 to 1/3. Usage guide: approx. 2.5 kg/m².

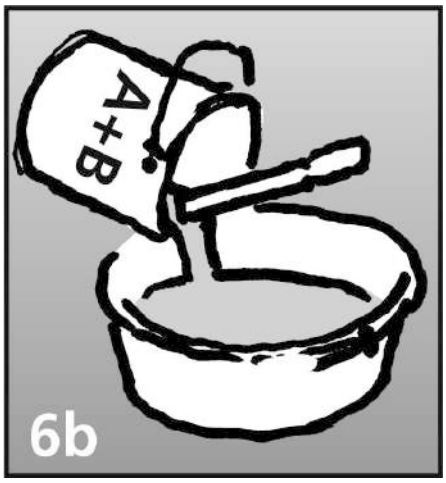
Note:

Connections to door and window elements etc. with a height of <15 cm (from upper edge of the water-bearing level) should have at least 5 cm of overlap. Connections to the surface sealant should be made with at least a 10 cm of overlap.

Properties KEMPEROL AC Speed / AC Speed⁺ Waterproofing	
Working time*[min.] (2% KEMPEROL CP catalyst powder).....	approx. 20
Rainproof* after [min.].....	approx. 35
Can be walked on* after [min.].....	approx. 35
Next coat can be applied* after [min.].....	approx. 60
with mastic asphalt [d].....	approx. 1
Short term temperature resistance [°C].....	250

* Values obtained at a temperature of 20 °C – 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

KEMPERDUR AC coating



Mixing

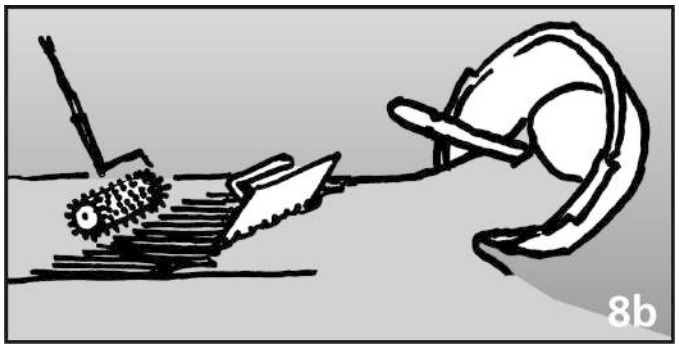
KEMPERDUR AC (component A) and KEMPEROL CP catalyst powder (component B) must be stirred thoroughly and then the mixture must be transferred into an new container.

Add KEMPERDUR AC filler (component C) and use a positive mixer to stir it in thoroughly.

Application

Spread KEMPERDUR AC coating over the whole area. In one operation, spread the mixture over the entire surface using an 8 mm notched trowel or a screed rake (V notch, notch height 6.6 mm) and draw off with the smooth side. Use a spiked roller to remove any air bubbles.

Consumption: at least 4.0 kg / m².

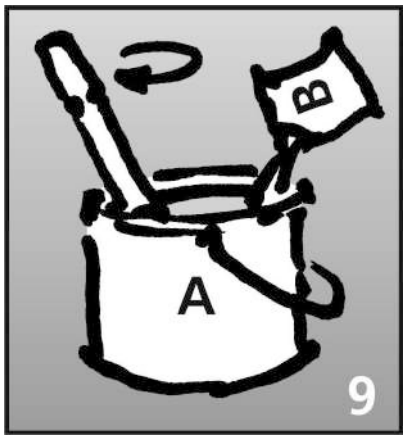


After curing

(approx. 60 min) the surface will be sealed with KEMPERDUR AC-Finish (figures 9, 10, 11). Add KEMCO TX Thixotropic Additive for ramps and slopes with a gradient of between 3% and 20% to prevent running. Stir required amount of KEMCO TX Thixotropic Additive (see table) with a slow running mixing device into component A of KEMPERDUR AC coating. Then add KEMPERDUR AC filler (comp. C) and transfer the mixture into a new container. After placing the mixture in another container, stir the corresponding quantity of KEMPEROL CP catalyst powder thoroughly into the mixture.

KEMCO TX Thixotropic Additive for KEMPERDUR AC coating		
Pack	**Slope**	**Quantity Thixotropic Agent**
33 kg	3 - 5 %	0,1 by weight of comp. A (approx. 10 g)
33 kg	5 - 7 %	0,2 by weight of comp. A (approx. 20 g)
33 kg	7 - 10 %	0,3 by weight of comp. A (approx. 30 g)
33 kg	11 - 20 %	0,6 by weight of comp. A (approx. 60 g)

KEMPERDUR AC-Finish and KEMPERDUR CS Microchips

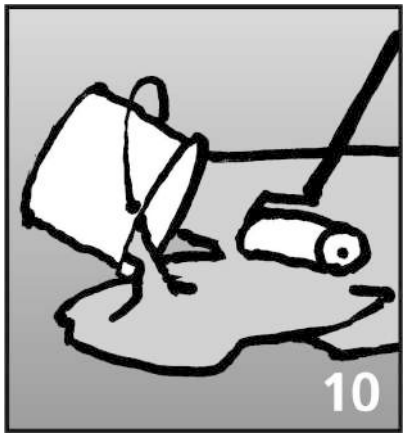


Mixing

KEMPERDUR AC-Finish must only be used in combination with KEMPEROL CP catalyst powder. Adjust the quantity of hardener added to suit the respective material temperature (see table KEMPERDUR AC-Finish).

Stir briefly but thoroughly.

Materialtemperature [°C]	Quantity to be added KEMPEROL CP catalyst powder		KEMPERDUR AC-Finish	
	100 g bag to 5 kg	in %	Pot life in container [min.]	Surface cured [min.]
+ 5	2 bags	4 %	35	60
+ 10	2 bags	4 %	30	45
+ 20	1 bags	2 %	20	30
+ 30	1/2 bags	1 %	20	30



Application

The KEMPERDUR AC-Finish must be distributed evenly on the surface immediately after mixing with KEMPEROL CP catalyst powder. Apply evenly in one operation using a nylon roller.

Consumption: at least 0.75 kg / m²

Only apply at substrate and ambient temperatures of below 30°C to achieve a seamless and streak free surface (store materials at room temperature).

KEMPERDUR CS Microchips

To create a decorative surface, the KEMPERDUR CS Microchips can be blown evenly onto the still wet material using a chip gun or sprinkled onto the surface by hand.

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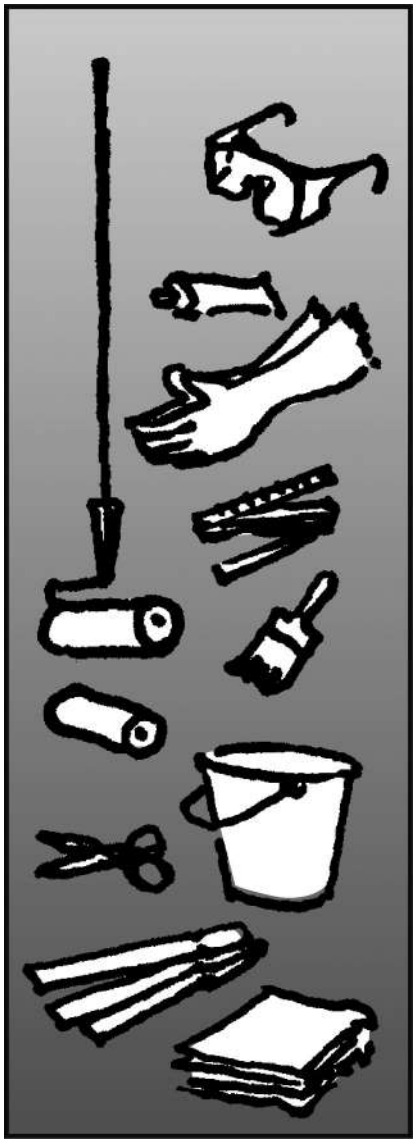
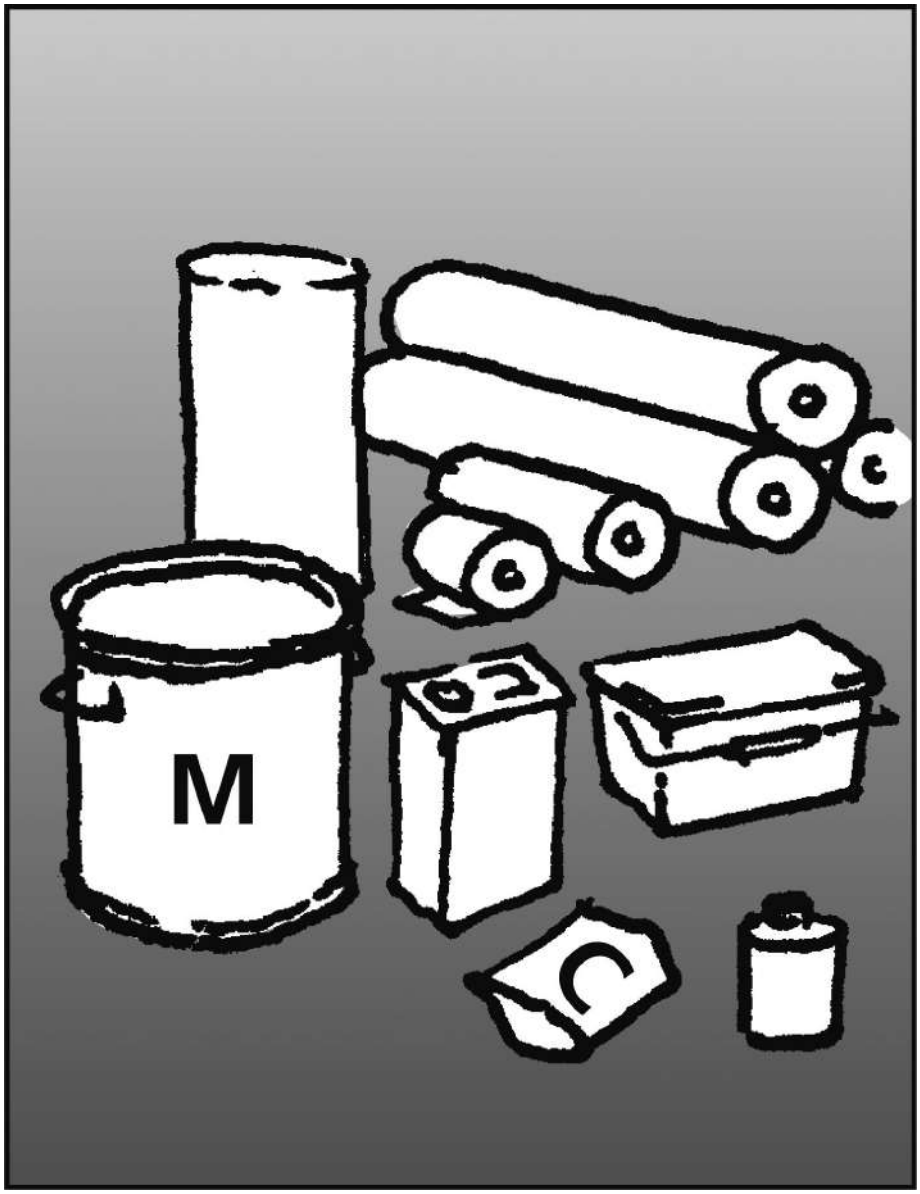
Instruction of Use KEMPEROL V 210 M





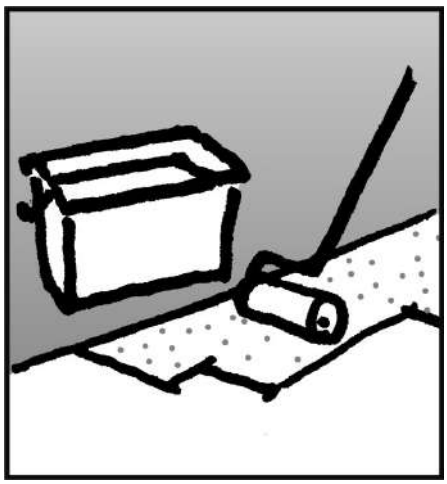
Safety glasses, gloves, folding rule, Perlon roller with handle, special brush, scissors, mixing bowl, stirring sticks, cleaning cloths

KEMPEROL V 210 M waterproofing (Comp. M),
KEMPEROL CP catalyst powder (Comp. C),
KEMPEROL UP-I inhibitor,
KEMPEROL nonwoven fabric,
KEMPERTEC primer according to primer recommendation,
KEMCO MEK Cleaning Agent,
KEMPEROL TP talcum

Substrates

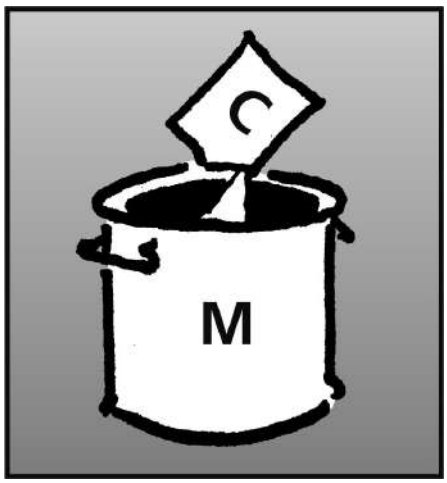
must be level, load-bearing, dry (residual moisture in concrete in the upper 2 cm <5%) and free of adhesion-hindering substances.

Pretreat the substrate in accordance with the recommended primer.



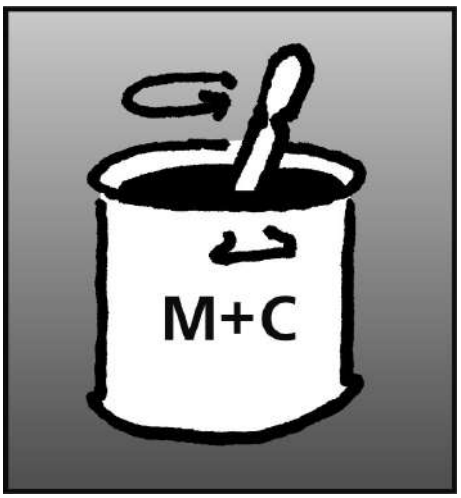
Eliminate unevenness in accordance with the manufacturer's instructions.

Adjacent parts must be masked and protected KEMPEROL V 210 M from contact.

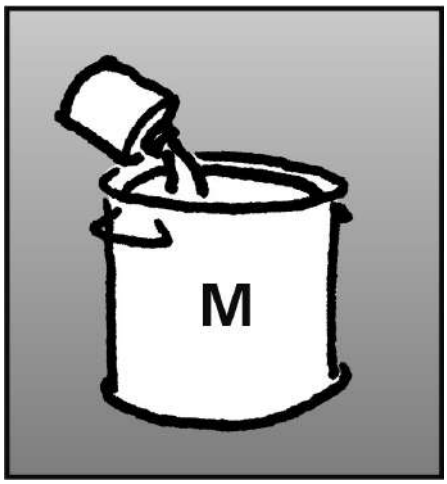


Catalyst powder

KEMPEROL CP catalyst powder (Comp. C) pour in KEMPEROL V 210 M Comp. M.



Mix component M and catalyst powder (component C). Mixing the powder is done with a drill or wooden stirrer.



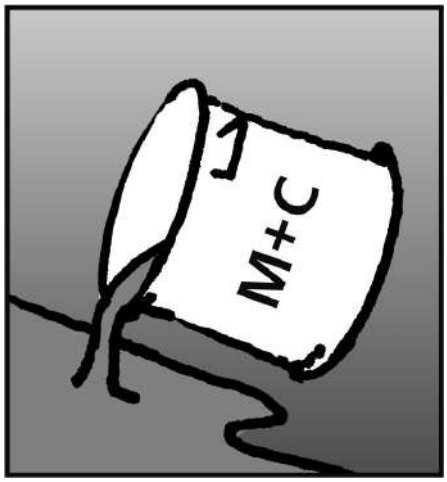
Temperature

Sealing only at substrate temp. above +5°C! Observe the dew point!

KEMPEROL UP-I inhibitor at temp. ≥ + 25 °C pour in comp. and mix with a drilling machine or stirring stick until streak-free.

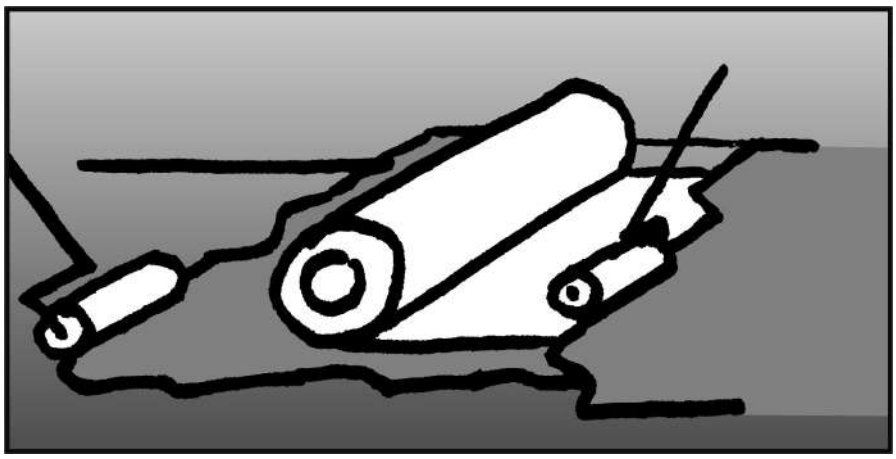
First layer

approx. 2/3 KEMPEROL V 210 M onto the surface and roll out evenly with the Perlon roller.



Fleece

The KEMPEROL non-woven fabric is applied directly into the liquid KEMPEROL V 210 M - template rolled with 5 cm overlap.



Second layer

Roll on KEMPEROL Vlies without bubbles.

With approx. 1/3 KEMPEROL V 210 M waterproofing re-soak wet in wet until saturation. Avoid excess material.

Important:

Personal protective equipment must be worn!

When processing the KEMPEROL V 210 M explosion protection of the working equipment is required.

With regard to the layer thicknesses, the minimum requirements according to the ETA must be met. Deviating national requirements must be taken into account.

Alkali protection

The waterproofing is only conditionally resistant to alkalis. Therefore, in case of expected long-term exposure as alkali protection after 7 days lying time KEMPERTEC EP5- or AC primer is applied to the waterproofing and scattered with KEMCO NQ 0712 Natural Quartz (see Technical Information TI 15 - Alkalinity).

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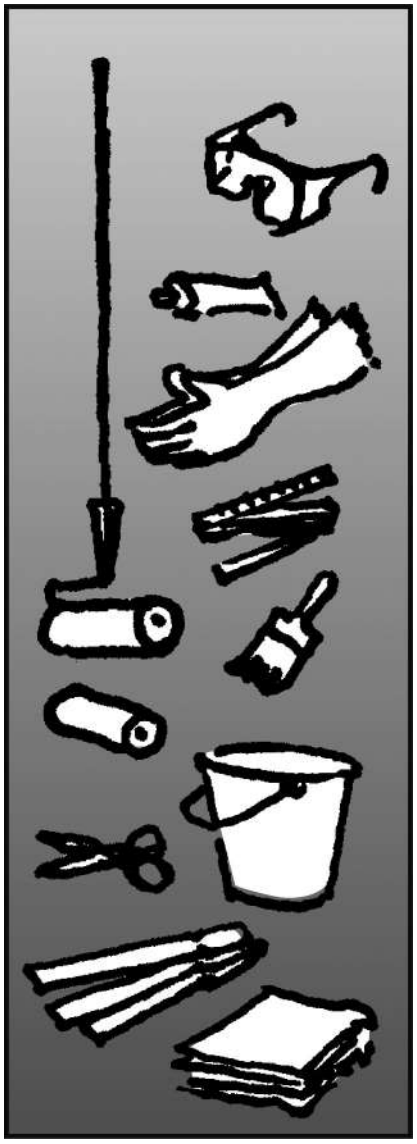
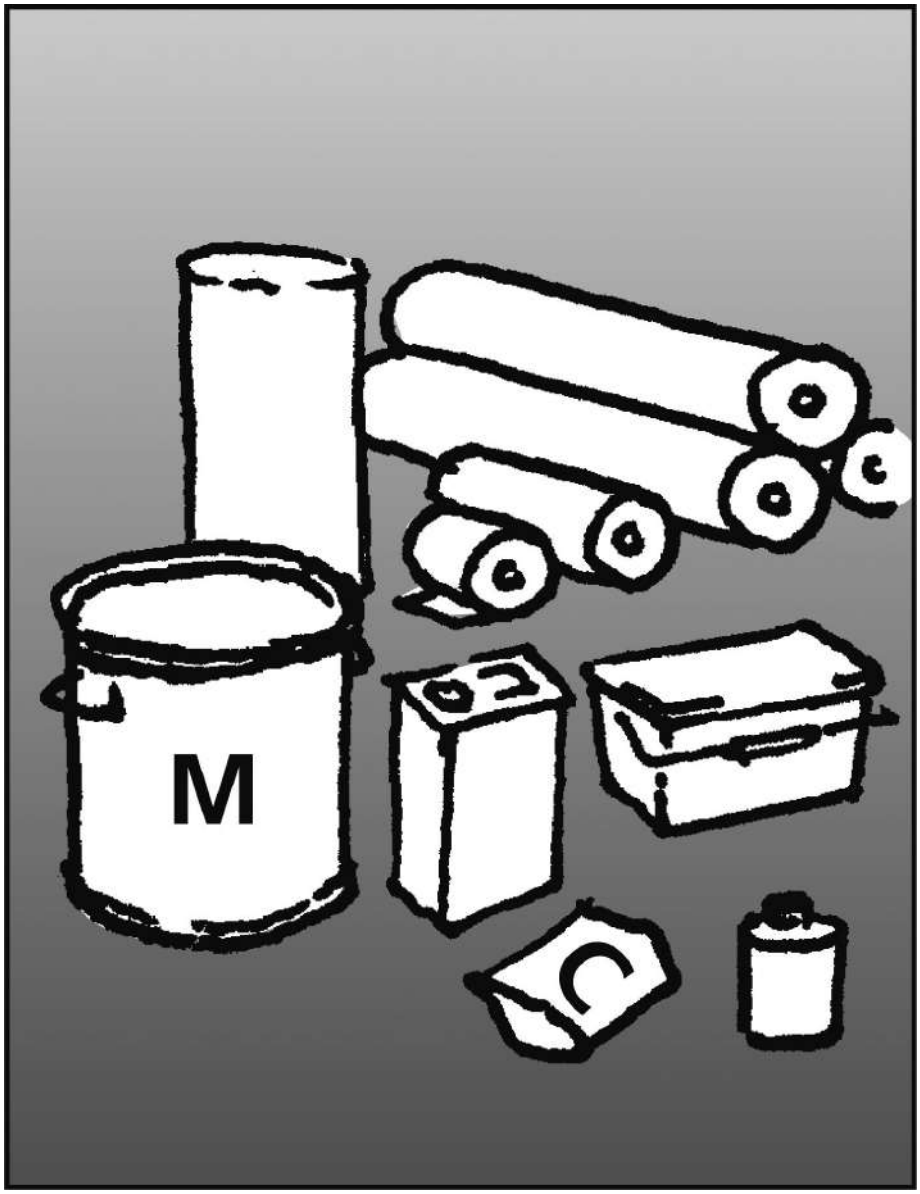
Instruction of Use KEMPEROL BR M





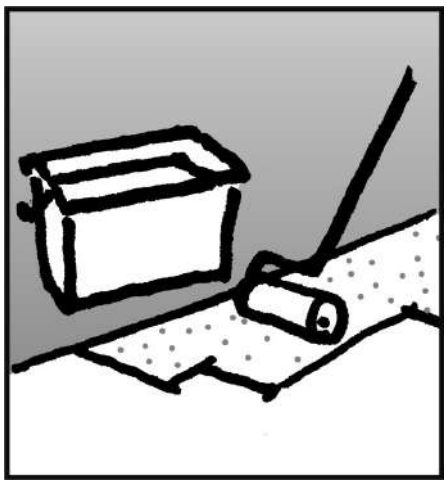
Safety glasses, gloves, folding rule, Perlon roller with handle, special brush, scissors, mixing bowl, stirring sticks, cleaning cloths

KEMPEROL BR M Waterproofing (Comp. M),
KEMPEROL CP catalyst powder (Comp. C),
KEMPEROL UP-I inhibitor,
KEMPEROL nonwoven fabric,
KEMPERTEC primer according to primer recommendation,
KEMCO MEK Cleaning Agent,

Substrates

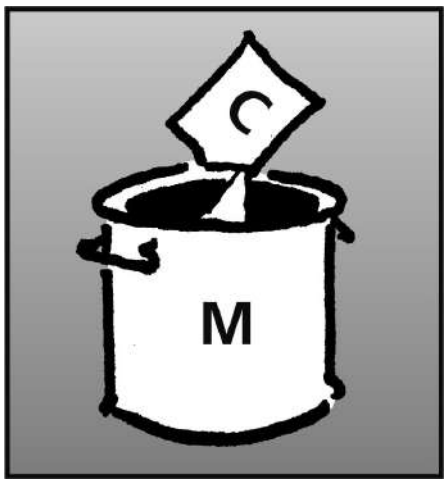
must be level, capable of withstanding loads, dry (residual moisture in the upper 2 cm of concrete < 5%) and free from materials that may hinder adhesion.

Pre-treat the substrate as per the priming recommendations.



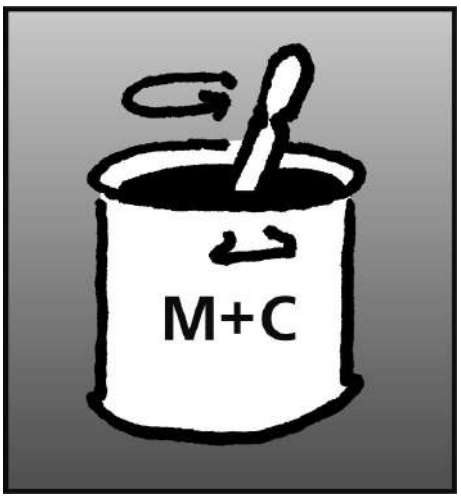
Level out any unevenness according to the manufacturer's instructions.

Adjacent parts must be masked and protected KEMPEROL BR M from contact.

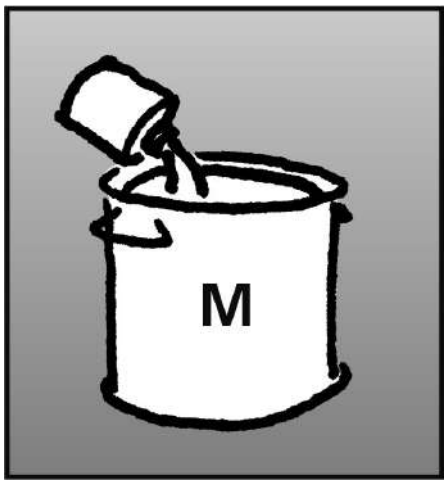


Catalyst Powder

KEMPEROL CP catalyst powder (Comp. C) pour in KEMPEROL BR M Comp. M.



Mix component M and catalyst powder (component C).The powder is mixed by means of a power drill or a stirring stick.



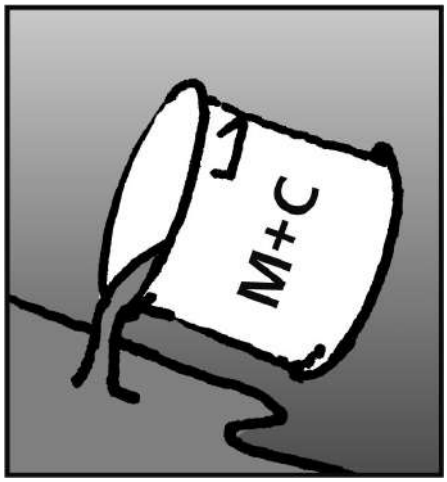
Temperature

Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

KEMPEROL UP-I inhibitor at temp. ≥ + 25 °C pour in comp. M and mix with a drilling machine or stirring stick until streak-free.

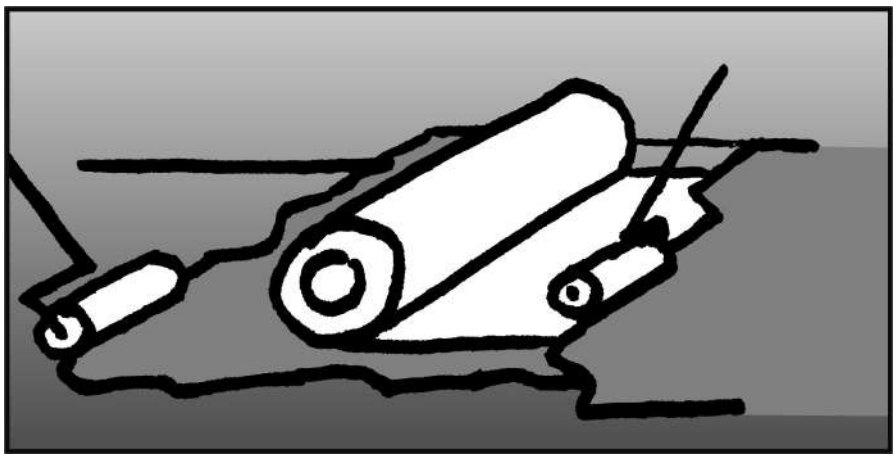
First layer

approx. 2/3 KEMPEROL BR M onto the surface and roll out evenly with the Perlon roller.



Fleece

The KEMPEROL non-woven fabric is applied directly into the liquid KEMPEROL BR M - template rolled with 5 cm overlap.



Second layer

Roll on KEMPEROL Vlies without bubbles.

With approx. 1/3 KEMPEROL BR M Waterproofing re-soak wet in wet until saturation. Avoid excess material.

Important: Personal protective equipment must be worn!

When processing the KEMPEROL BR M explosion protection of the working equipment is required.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Alkaline protection

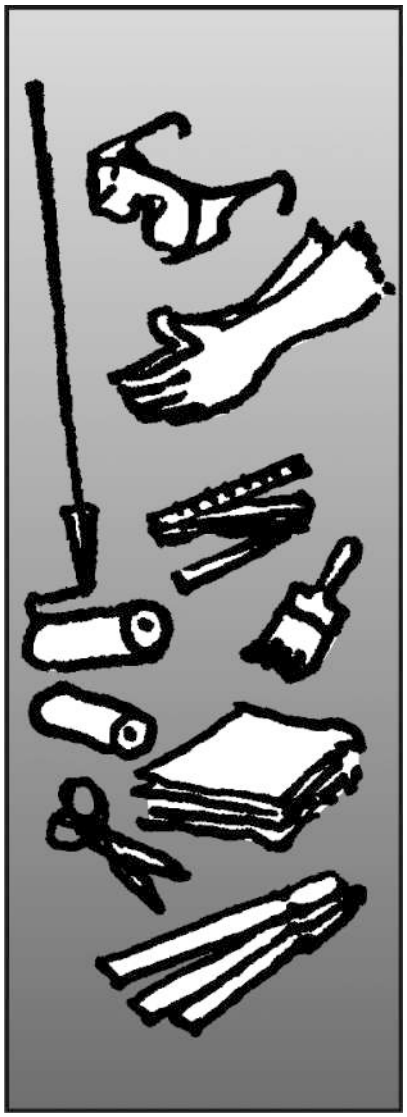
The waterproofing provides limited alkaline resistance.

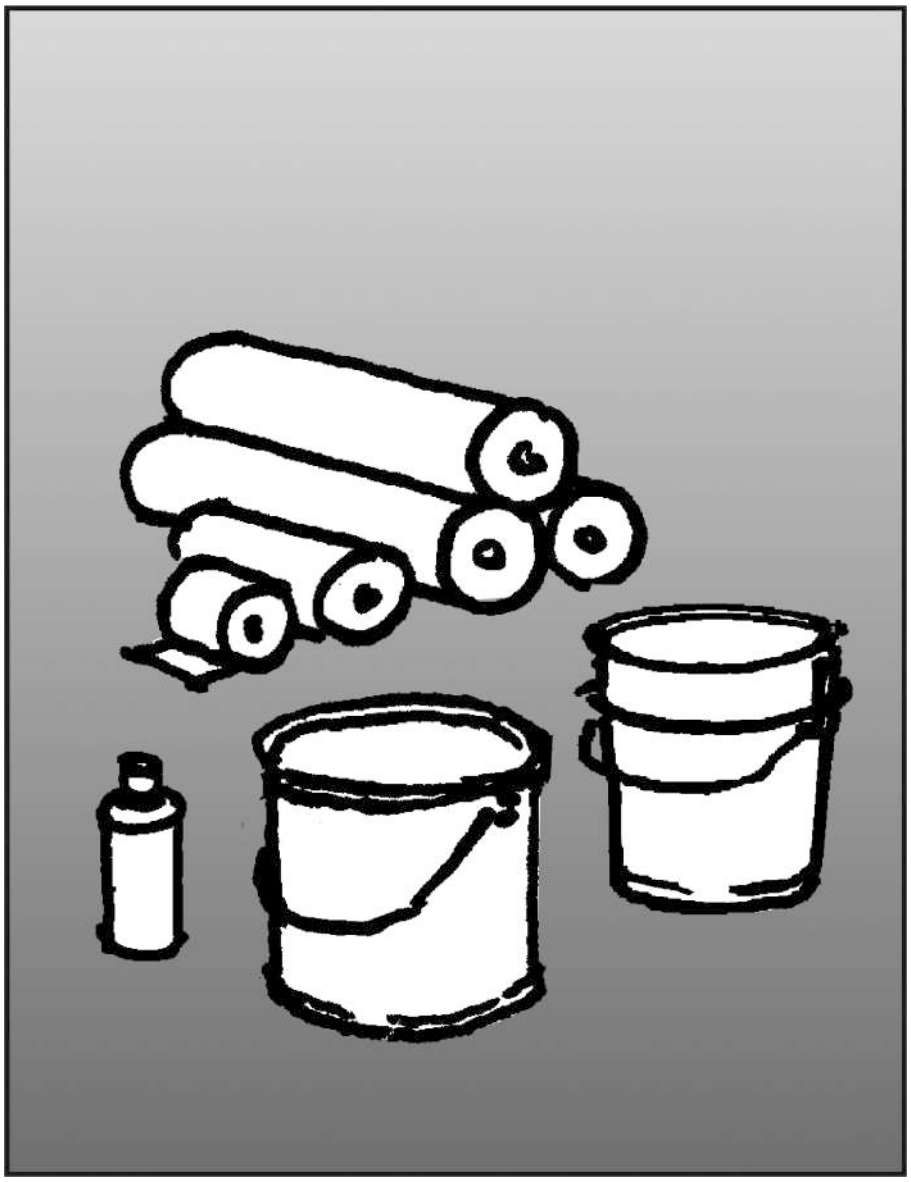
Therefore, in case of expected long-term exposure as alkali protection after 7 days lying time KEMPERTEC EP5- or AC primer applied to the waterproofing and scattered with KEMCO NQ 0712 Natural Quartz .

(refer to Technical Information TI 15 - Alkalinity).

Issued: Vellmar, 2024-02-29

Processing instructions KEMPEROL LF





Safety glasses, gloves, folding rule, Perlon roller with handle, special brush, cleaning cloth, scissors, stirring sticks

KEMPEROL LF,
KEMPERTEC primer according to primer recommendation,
KEMPEROL 165 fleece,
KEMCO MEK Cleaning Agent

Substrates

must be level, load-bearing, free from adhesion-reducing substances and prepared accordingly.

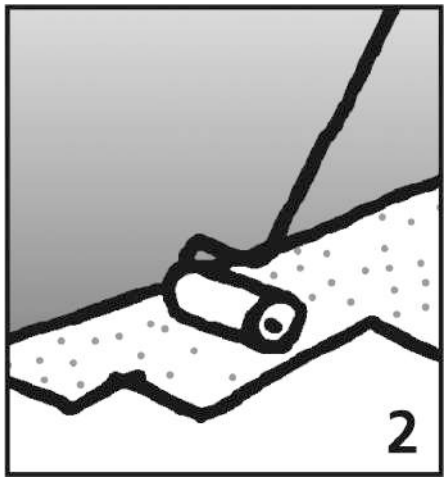
Due to the moisture tolerance of the material, KEMPEROL LF it can be processed on matt damp substrates.

Pretreat the substrate according to the technical data sheet.

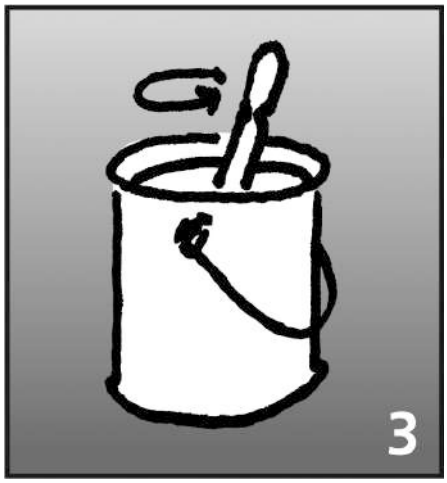
Level out any unevenness according to the manufacturer's instructions. Adjacent parts must be masked and protected KEMPEROL LF from contact.

Primer

For some substrates, priming may not be necessary. In general, the primer recommendation for KEMPEROL LF must be taken into account.

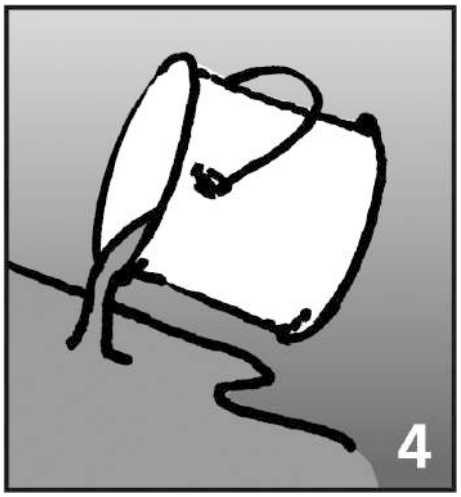


KEMPEROL LF Stir with a wooden stirring rod so that there are no streaks. A uniform color tone is created (remove skin formation).



Temperature

Seal only at substrate temperatures above +5°C! Observe the dew point!

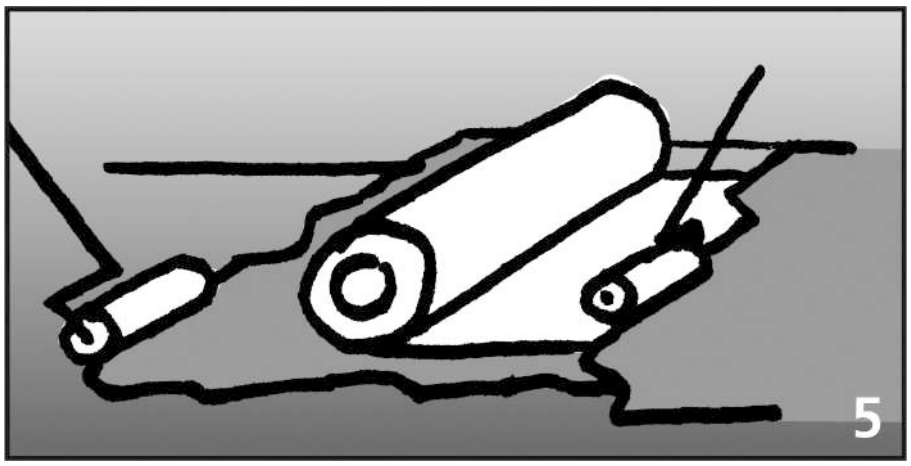


Template

approx. 2/3 KEMPEROL LF onto the surface and roll out evenly with the Perlon roller.

Non-woven fabric

The KEMPEROL 165 fleece is rolled directly into the liquid KEMPEROL LF template with 5 cm overlap.



Next layer

KEMPEROL 165 fleece roll on without bubbles. With approx. 1/3 KEMPEROL LF re-soak wet in wet until saturation. Avoid excess material.

To be observed:

Joints at door and window elements etc. with a height < 15 cm (from the top edge of the covering) must be made with at least 5 cm overlapping, joints to the surface sealing and third-party products with at least 10 cm overlapping.

With regard to the layer thicknesses, the minimum requirements according to the ETA must be met. Deviating national requirements must be taken into account.

Important: Personal protective equipment must be worn!

Issued: Vellmar, 2019-12-11

Processing instructions KEMPEROL FALLSTOP

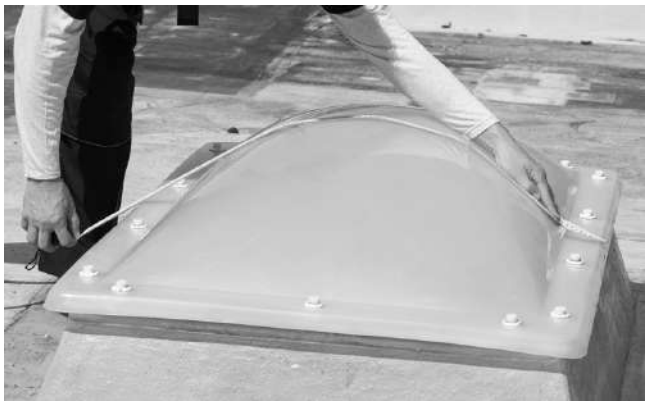
Please note!

Make sure the skylight domes you wish to coat are not damaged (no holes, cracks, etc.) and have been installed professionally on a kerb in strict accordance with the relevant instructions of the respective manufacturer. The substrate must be dry and free from any water which may have penetrated it. The substrate temperature must be at least 3K higher than the dew point temperature. The substrate temperature must be at least +10°C and the relative air humidity < 80%. During application always wear personal protective equipment (goggles, gloves, etc.) incl. fall protection equipment to BGR 198. Please ensure good and constant ventilation at the respective workplace during and after application to guarantee homogeneous curing.

Application tools

For processing of KEMPEROL FALLSTOP a digital scale, masking tape, the KEMPERTEC foam roller, brushes, stirring sticks and the KEMPERTEC V4A measuring comb are required.

Measuring



The required amount of material must be calculated prior to coating the skylight dome. This involves measuring the entire skylight dome area, incl. the curvature.

Calculating the required material

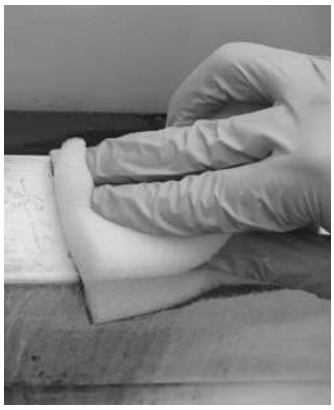
KEMPEROL FALLSTOP must be applied with a total material consumption of 1.6 kg/m². In order to be able to achieve a uniform coating thickness due to the curvature, 4 working passes of 400 g/m² each are required.

Calculation table

Calculation of the skylight dome					Calculation of the total amount of material				Calculation of the amount of material per layer			
m (length)	x	m (width)	=	m²	x	1.6 kg/m²	=	kg	:	4	=	kg

You will also find a corresponding calculation aid in the construction site protocol KEMPEROL FALLSTOP.

Pre-cleaning



Depending on the degree of soiling, old and weathered skylight domes must be cleaned carefully using a mop and water prior to application. Use a scouring sponge to clean soiled frames thoroughly.

Cleaning

New and pre-cleaned skylight domes must be thoroughly wiped with a lint-free cloth and KEMPERTEC FALLSTOP Cleaner cleaned. The cleaner must flash off for at least 15 minutes before coating work can be started. Avoid water inclusions (e.g. at screw connections or in the sealing strip) as a result of the cleaning work.

Masking

When applying KEMPERTEC® FALLSTOP to skylight domes with a frame, remember to also fully coat the top surface of the frame. Cover the sides of the frame carefully with masking tape to provide adequate protection. Only remove the masking tape once the material has dried sufficiently to prevent any “runs” or “drips”.

Coating

1) Stir the material after opening the container. Subsequently weigh the correct amount of required material for each work step (400 g/m²/step) for the relevant skylight dome.

2) The weighed material is either poured out in portions on top of the dome light, or processed directly from the container. The KEMPERTEC foam roller is applied evenly in a crosswise direction.

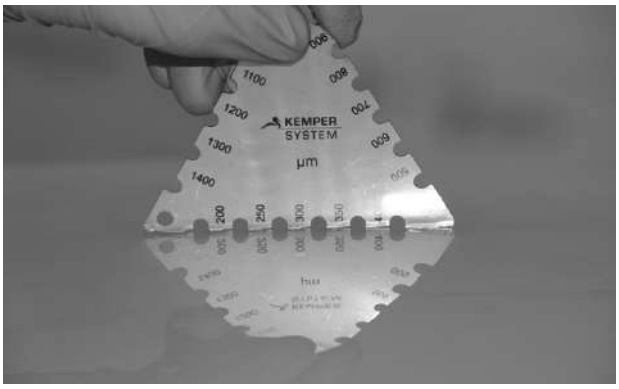
Coating

3) Apply the material evenly, both horizontally and vertically, using a foam roller. It is crucial to prevent tiny bubbles and foam forming on the surface.

Due to the inclination of the skylight dome, KEMPEROL FALLSTOP after an initial distribution, it is necessary to roll again from the bottom to the top to compensate for the material running down. Depending on the inclination of the skylight dome, this reworking must be repeated after a few minutes in order to achieve the required layer thickness over the entire surface. The material can be processed for up to 30 minutes, depending on the weather. As soon as the material starts to “pull threads” during processing, no further rework is possible. After a hardening time of approx. 4 hours is KEMPEROL FALLSTOP rainproof and can be further coated.

Coating

4) The upper frame/edge of the dome light is also KEMPEROL FALLSTOP coated. The foam roller or a paintbrush can also be used for this purpose. Avoid material build-up by evenly distributing material that has run down onto the frame/edge.

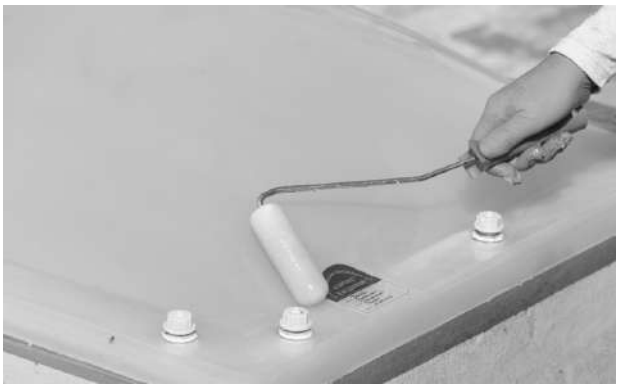


5) At the end of each working cycle, the applied layer thickness is checked at various bodies using the KEMPERTEC V4A measuring comb. For this purpose, the right and left “feet” of the measuring comb are pressed into the still wet coating and the layer thickness is read off on the basis of the scaling of the “teeth” (400 g corresponds to 400 µm).

Repeat three times

After approx. 4 hours KEMPEROL FALLSTOP can be further coated. The described coating process must be repeated 3 times. The described work steps 1 to 5 must be followed. Attention! Before the fourth and final coating pass, KEMPEROL FALLSTOP the seal must be applied.

KEMPEROL FALLSTOP Seal



The seal, marked with a consecutive number, KEMPEROL FALLSTOP should be filled in with a solvent-resistant pin and affixed to the cured KEMPEROL FALLSTOP third layer. The seal is also coated with the last coating pass.

Practical tips for application

- Pay attention to all external factors that may have an impact on the surface to stop insects, leaves and other debris becoming embedded in the coating.
- During and immediately after the processing of KEMPEROL FALLSTOP air-conditioning and ventilation systems in the vicinity of the skylight domes must be switched off (see Technical Information 23 “Application of products containing solvents”).
- Always dry entrapments or films of water that may have formed underneath screw caps or sealing tapes before coating skylight domes (an air blower is ideal for this task).
- Cover skylight dome hinges and opening mechanisms carefully with masking tape to prevent any infiltration of material and to guarantee correct operation.
- When processing the KEMPEROL FALLSTOP a small amount of material should always be pushed in front of the KEMPERTEC foam roller. No noise should be heard through the foam roller during processing. These noises are an indicator of insufficient material application.
- Place plastic film on top of the open container to help stop a skin forming on the material in the container.
- Bubbles in the cured KEMPEROL FALLSTOP coating must be cut open, sanded and reworked with KEMPEROL FALLSTOP .
- In extreme ambient conditions (e. g. heat, wind, etc.), it may be wise to apply the determined amount of material in more than four work steps to achieve the best possible finish.
- Be sure to remove the applied masking tape before the complete hardening of KEMPEROL FALLSTOP.
- If a surface is to be coated KEMPEROL FALLSTOP after more than 7 days, the substrate must be pretreated by means of sanding or adhesion promoter. For details, please contact our Technical Customer Service, phone 0561 8295-0.
- If necessary, a before/after measurement can be performed by ultrasound to non-destructively determine the coating thickness of KEMPEROL FALLSTOP in the cured state. The cured layer thickness must be at least 0.9 mm. For details, please contact our Technical Customer Service, phone 0561 8295-0.

Important notice

- KEMPEROL FALLSTOP requires a hardening time of 7 days to fulfill the functions of **fall-through resistance** and **increased hail resistance**.
- Please refer to our technical data sheets for the listed products.
- KEMPEROL FALLSTOP ensures fall-through safety for 5 years. For an object-related extended warranty to a total of 10 years, the submission of a fully completed **KEMPEROL FALLSTOP construction site protocol** is required.

Discover more information on our website **www.kemperol-fallstop.de** e.g.:

- construction site form available as a download
- the presentation and processing film KEMPEROL FALLSTOP
- a list of frequently asked questions and answers about KEMPEROL FALLSTOP (FAQ)

KEMPEROL FALLSTOP...
... tested quality

The functionality of KEMPEROL FALLSTOP has been proven in numerous tests.

Please feel free to request our test certificates:

- Testing of fall-through protection to GS Bau 18
- Measuring of the light transmission level
- Testing of fall-through protection to GS Bau 18 in temperatures below zero
- Testing of the hail resistance class
- Testing of accelerated UV ageing with determination of the dynamic and static load carrying capacity and elasticity
- Exposure measurement for indoor and outdoor use
- Testing of fire behaviour to DIN EN 13501-1
- Certificate of melting behaviour to DIN 18230-1:2010-9

BG RCI Berufsgenossenschaft Rohstoffe und chemische Industrie

Friedmann & Kirchner [Gesellschaft für Material- und Bauteilprüfung mbH]

Hoch Fladungen

ibs

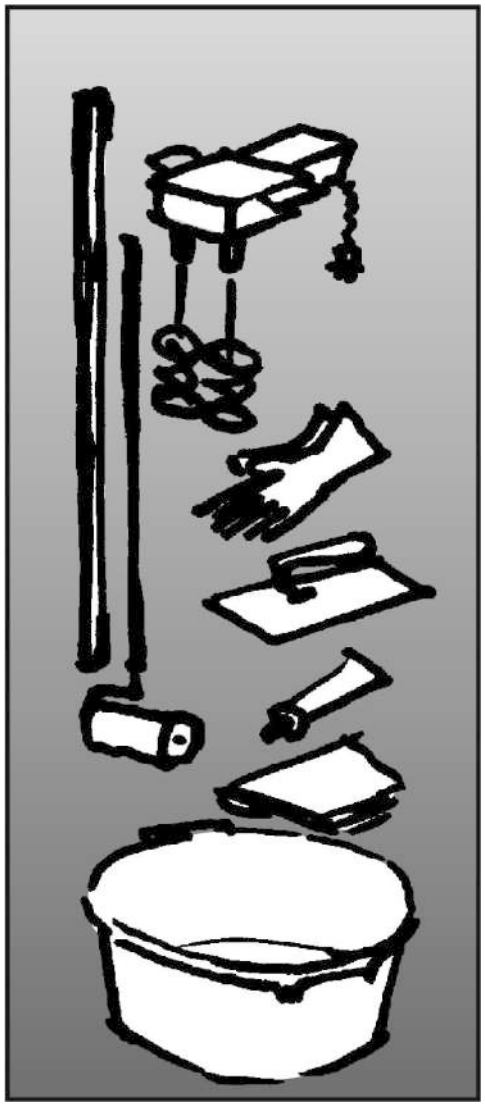
KIT Karlsruher Institut für Technologie

kiwa Partner for progress

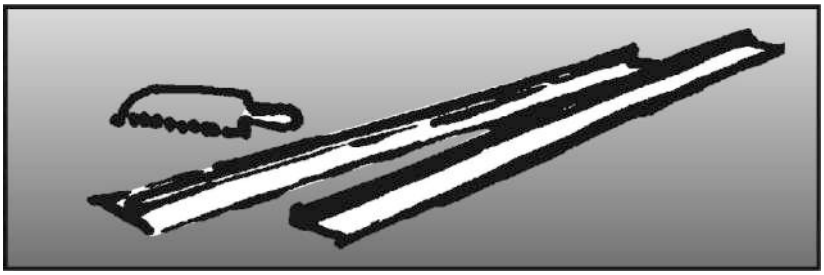
MPA NRW Materialprüfungsamt Nordrhein-Westfalen PRÜFEN • ÜBERWACHEN • ZERTIFIZIEREN

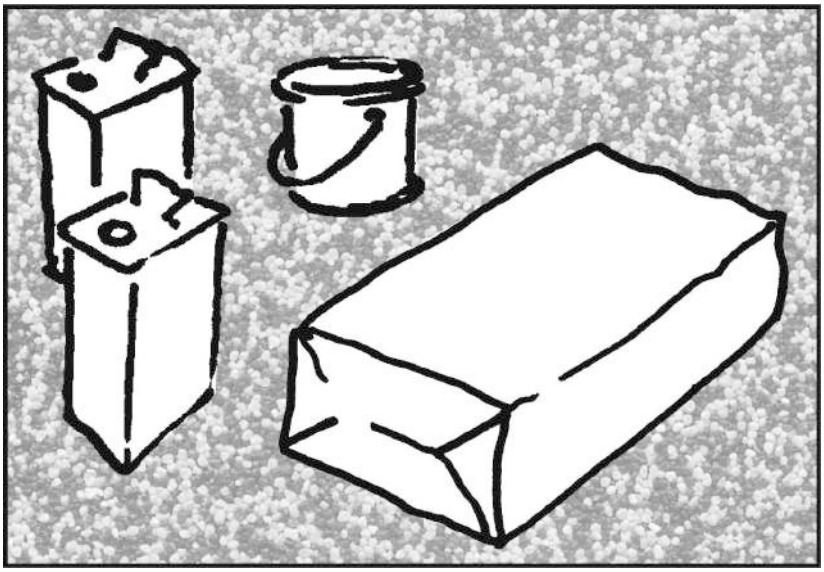
Issued: Vellmar, 2019-12-11

Processing instructions KEMCO Decor Stone / Natural Stones



Straightedge, Perlon roller, pugmill mixer, smoothing trowel, safety goggles, gloves, cleaning cloths, cistern





KEMCO Decor Stone / Natural Stones consisting of
– KEMCO QB1 Binder and
– KEMCO Decor Stone / Natural Stones
KEMPERTEC Primer,
KEMCO NQ 0408 Natural Quartz,
KEMCO MEK Cleaning Agent,
expansion profile rails 8 mm and
edge trim profiles if necessary

KEMCO Decor Stone / Natural Stones – decorative coverings for balconies and terraces

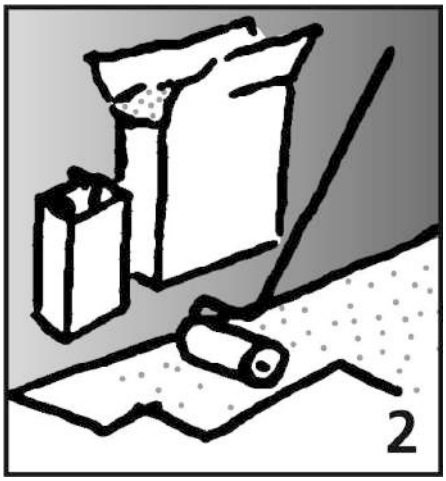
Substrates

Substrates like concrete, screed or KEMPEROL waterproofing products must be level, dry, firm and free of from any substances which may hinder adhesion. Surfaces must be prepared and primed in line with the manufacturer's guidelines.

Adjacent parts must be masked and protected from contact with KEMPER SYSTEM products.

Substrate

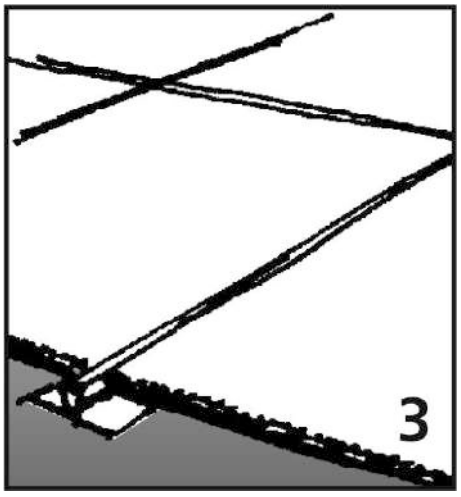
Pretreat according to the primer recommendation.



Bonding bridge

In the still fresh KEMCO POX 2K Primer or KEMPERTEC EP5 primer will be ca. 300 g/m² KEMCO NQ 0408 Natural Quartz as a bonding layer is spread.

The still wet KEMPERTEC AC Primer is scattered with at least 2 kg/m² KEMCO NQ 0408 Natural Quartz as a bonding coat in grain-to-grain contact.

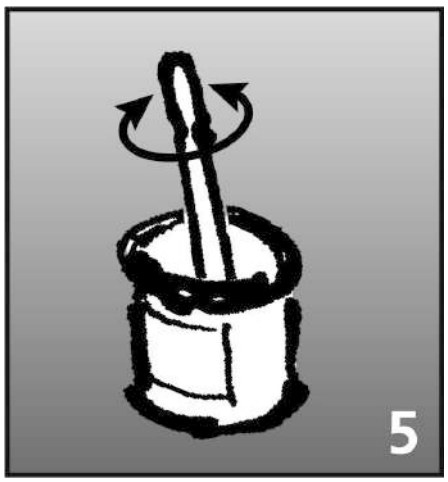


Field division

For larger areas, field divisions must be made in accordance with the tiling guidelines.

Expansion profile rails are used for this purpose.

KEMCO Decor Stone / Natural Stones should be filled into the existing cistern.



Mixing

After opening the container, the binding agent must be thoroughly stirred with a stirring stick.

Addition

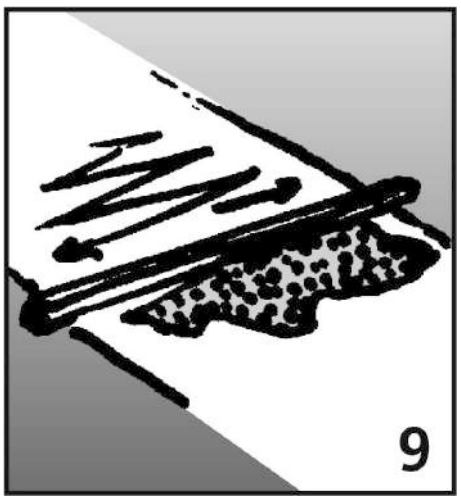
KEMCO QB1 Binder should be poured into a pre-formed trough of the KEMCO Decor Stone / Natural Stones until completely empty.

Mixing

The KEMCO QB1 Binder should be mixed thoroughly with slow-speed pugmill mixer for 5 minutes in the KEMCO Decor Stone / Natural Stones until the binding agent and stones are mixed homogeneously.

Processing

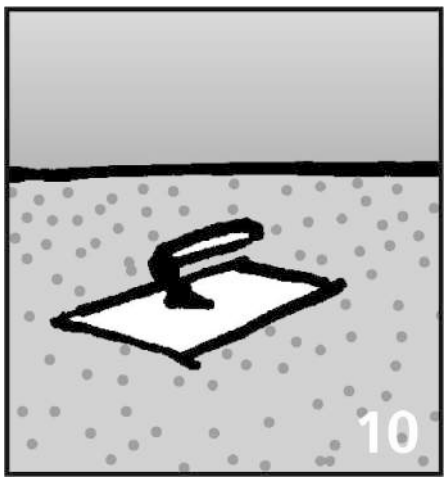
Pour the mixture onto the surface and empty the cistern completely immediately after mixing.



KEMCO Decor Stone / Natural Stones should be spread and leveled with a straightedge.

Smoothing

KEMCO Decor Stone / Natural Stones should be compacted and smoothed with a smoothing trowel in the final step.



Important:

Personal protective equipment must be worn!

Released: Vellmar, 2024-03-04

Application instructions KEMCO Decor Stone / Natural Stones on vertical surfaces

To apply KEMCO Decor Stone / Natural Stones on vertical surfaces, the substrate must be dry and provided with an adhesive layer. To produce the adhesive layer, you need:

KEMCO Decor Stone / Natural Stones

KEMCO QB1 Binder

KEMCO TX Thixotropic Additive

Consumption per m² at a layer thickness of 6 mm: min. 12 kg (finished mixture)

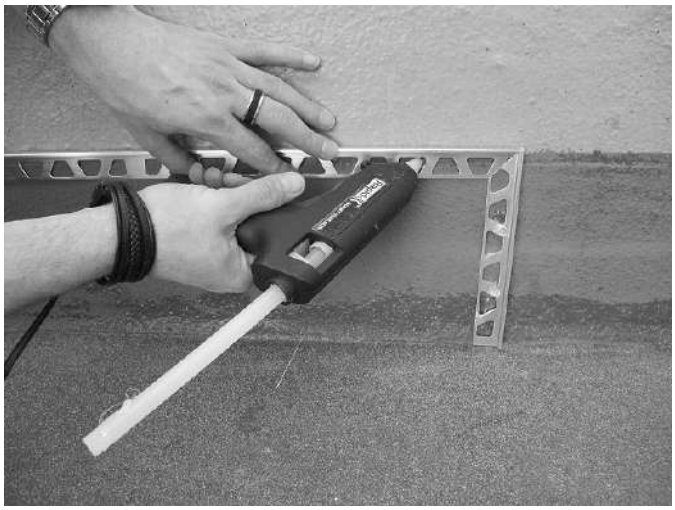
Substrates

Substrates like concrete, screed or KEMPEROL waterproofing products must be dry, firm and free of from any substances which may hinder adhesion.

Preparation

In order to delimit the coating areas we recommend the use of 6 mm edge profiles also at the wall connection. Fasten the chosen profile at several points (min. every 20 cm) using a hot glue gun.

The fastening of edge and connection profiles corresponds to the recommendations of the ceramic industry.



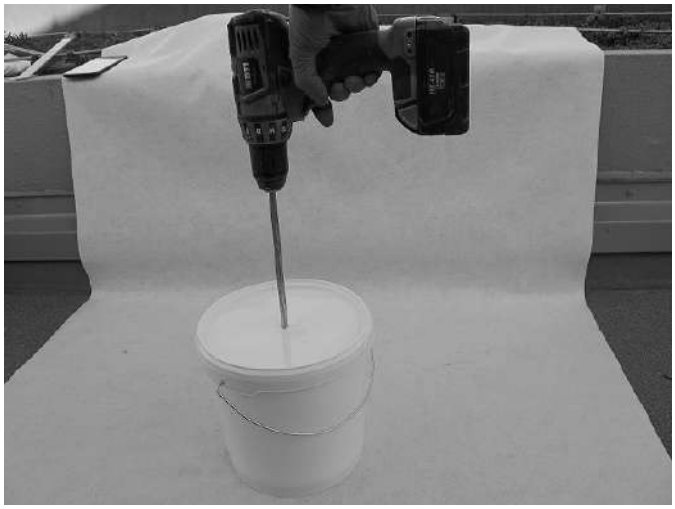
Application

Please note that when applying KEMCO Decor Stone / Natural Stones to vertical surfaces, 8% of KEMCO TX Thixotropic Additive must be stirred into KEMCO QB1 Binder.

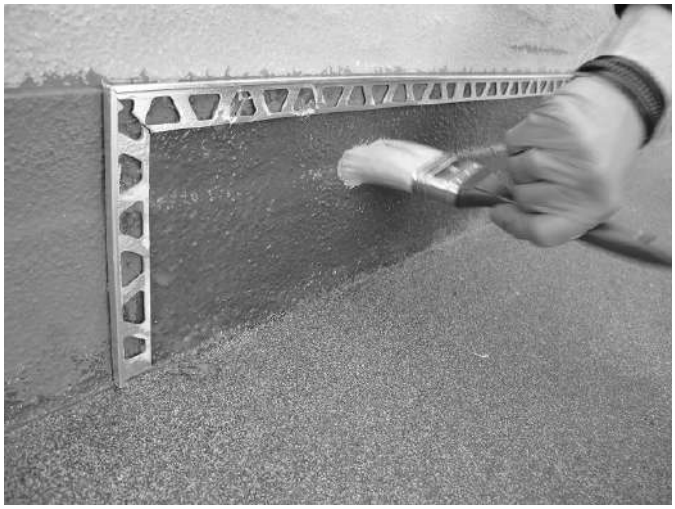
To produce a length of 2 rm with a connection height of min. 15 cm in the vertical direction, you need

- 6.25 kg KEMCO Decor Stone / Natural Stones
- 437.5 g KEMCO QB1 Binder
- 35 g KEMCO TX Thixotropic Additive

KEMCO QB1 Binder (437.5 g) and KEMCO TX Thixotropic Additive (35 g) to be thoroughly mixed using a suitable mixing device, until a homogeneous mixture is achieved.



Then apply a thin layer of the mixture of KEMCO QB1 Binder and KEMCO TX Thixotropic Additive (approx. 20 % of the mixture) as an adhesive layer to the whole length of the connection.



Into the remaining mixture (approx. 80%) consisting of KEMCO QB1 Binder and KEMCO TX Thixotropic Additive, evenly stir 6.25 kg KEMCO Decor Stone / Natural Stones until stones and binder are homogeneously mixed.

The finished mixture is applied on vertical surfaces wet-on-wet using a smoothing trowel.

Remaining quantities of this mixture must **not** be used for the horizontal surfaces!

Personal protective equipment must be worn.

Issued: Vellmar, 2023-07-06

Technical Information 03 Layer thicknesses according to regulatory requirements and guidelines

Regulatory requirements and guidelines

There are various requirements regarding the layer thickness of waterproofing and surfacing systems. The required layer thickness can vary depending on the applicable guidelines and/or the area of application. Moreover, national and object-specific requirements must be considered. The regulatory requirements regarding the layer thickness are specified by the German Verwaltungsvorschrift Technische Baubestimmungen (VV TB, administrative rule Technical Building Regulations) in connection with the respective performance levels. European Technical Approval (CE mark) indicates the fitness for use of the layer thickness and the respective performance levels. The requirements regarding the layer thickness in the German VV TB are:

For unused roof spaces	slope >2%	1.5 mm
	slope <2%	2.0 mm
For roof spaces with limited use *		2.0 mm

* According to the German VV TB these include balconies, loggias and terraces

The layer thickness and performance level requirements may vary slightly in accordance with the guidelines of various associations, but are never below the legal requirements of the German VV TB e. g. Deutsches Dachdeckhandwerk (Association of German Roofers): Minimum requirement in accordance with Table 7 for used and unused roof spaces as specified by the waterproofing regulations is 2.1 mm.

Agreements which deviate from common guidelines are always possible under private law.

Layer thicknesses with a system design

When determining the layer thickness, it must be considered that the waterproofing product is a so-called kit which, in addition to the waterproofing materials, also contains further components (e. g. primer, coatings). The description and the resulting overall minimum layer thickness of the kit can be found in the ETAs under “Description of the product”.

We usually achieve a layer thickness of approx. 0.3 mm with the KEMPERTEC primers. The layer thickness of KEMPEROL waterproofing is to be determined depending on the consumption; corresponding consumption quantities can be found in the technical data sheets of the waterproofing systems.

Examples of sealants:

Product / Layer thicknesses	1.8 mm	2.0 mm	2.1 mm
KEMPEROL 1K-PUR waterproofing	at least 3.4 kg/m²	-	at least 4.0 kg/m²
KEMPEROL 2K-PUR waterproofing	-	at least 3.0 kg/m²	at least 3.6 kg/m²
KEMPEROL V 210 M	at least 2.8 kg/m²	-	at least 3.6 kg/m²
KEMPEROL AC Speed	at least 2.5 kg/m²	at least 2.7 kg/m²	at least 2.9 kg/m²

Examples of system superstructures:

Product / Layer thicknesses	≥ 1.8 mm	≥ 2.0 mm	≥ 2.1 mm
KEMPEROL 1K-PUR waterproofing	-	at least 3.4 kg/	-
KEMPERDUR Deko	-	m²at least 1.0 kg/m²	-
KEMPEROL 1K-PUR waterproofing	-	at least 3.4 kg/m²	-
KEMPERDUR quartz coating	-	at least 4 kg/m²	-
KEMPERDUR Deko transparent	-	at least 0.7 kg/m²	-
KEMPEROL 2K-PUR waterproofing	-	-	at least 3.0 kg/m²
KEMPERDUR Deko 2K	-	-	at least 1.0 kg/m²
KEMPEROL 2K-PUR waterproofing	-	-	at least 3.0 kg/m²

Product / Layer thicknesses	≥ 1.8 mm	≥ 2.0 mm	≥ 2.1 mm
KEMPERDUR HB thick coating	-	-	at least 5.0 kg/m²
KEMPEROL 2K-PUR waterproofing	-	-	at least 3.0 kg/m²
KEMPERDUR TC coating incl. spreading in	-	-	at least 3.0 kg/m² (+ at least 4 kg/ m² spreading in)
KEMPEROL AC Speed	-	-	at least 2.5 kg/m²
KEMPERDUR AC coating	-	-	at least 4 kg/m²
KEMPERDUR AC-Finish incl. KEMPERDUR CS Microchips	-	-	at least 0.6 kg/m²

This means that KEMPER SYSTEM fulfills the legal requirements for layer thickness according to the Verwaltungsvorschrift Technische Baubestimmungen (VV TB) and the generally accepted rules of technology, e.g. DIN series 18531-18535, ATV DIN 18336 and Rule for sealants.

Note: This edition supersedes all previous editions of Technical Information 03.

Issued: Vellmar, 2024-03-04

Technical Information 10.3 – Water Vapour Permeability and Blistering

Diffusion describes the attempt of materials to counter a concentration difference. A net movement (diffusion) of a substance from areas of higher concentration to areas of lower concentration can be observed, resulting in a partial pressure difference. This applies, in particular, to water in the form of water vapour.

Either (µ 2300*) and /BR (µ 11000*) and (µ 3100*) as diffusible systems are in principle suitable to prevent water vapor diffusion, if necessary. Choosing one of these sealant systems allows soaked substrates to dry out.

In addition to the selected waterproofing system, the water vapour diffusion process depends on the system design and atmospheric conditions, such as wind, humidity and temperature.

The following facts must also be considered for these systems. If more water vapour develops than can be actually diffused by the system, blistering may occur. The temperature, in particular, influences the amount of water vapour developed. High temperatures - increased development of water vapour - can cause the “permeability limit” to be exceeded. A typical indication of this is that the blister increases in size as the temperature rises and disappears in the evening or night as the temperature falls. Blistering increases if water vapour can only escape at a few points (e.g. with various substrates, cracks, joints, gaps, material thicknesses, etc.). Depending on the type of load/stress to which the waterproofed surface will be subjected, blisters may limit the desired use.

During the planning phase, i.e. prior to actual construction, tests or inspections must be carried out to determine the current condition of the surface, in particular in terms of its moisture content (opening of the surface, determination of the residual moisture with a CM device or via measurement of the electrical resistance, oven-dry sample to DIN 1048-05). The result of the test can be used to choose suitable measures if necessary. For example, for a roof this could involve the installation of heat insulated roof vents or the flushing and simultaneous aspiration of the heat insulation with preheated air.

Conclusion:

Even with a diffusible system, such as the sealants from KEMPER SYSTEM, paling can occur if there is an excess of water vapor. However, due to the excellent properties of KEMPEROL sealants, these usually have no effect on the functionality of the sealant. However, depending on the planned use or loading, they undoubtedly represent a certain limitation of the latter, about which a client must not remain in uncertainty.

*Test temperature 23°C

Note: This edition supersedes all previous editions of Technical Information 10.3

Issued: Vellmar, 2024-03-04

Technical Information 15 - Protection against alkalinity of KEMPEROL and KEMPERDUR products

Without appropriate protection, KEMPER SYSTEM polyurethane- and polyester-based products exhibit inadequate long-term resistance to media with extreme pH values and, therefore must be protected against the damaging effects of alkaline media.

Alkaline reacting materials are encountered on the construction project.

Due to such a high pH value (> 9), there is a long-term risk of damage to the sealant or coating if work is carried out directly on KEMPEROL or KEMPERDUR products containing cement, e.g. in the form of an inclined screed or ceramic coverings laid in a mortar bed.

Chemically, this type of damage is referred to as saponification. This saponification represents a destruction or splitting of the polymers and, in addition to an embrittlement of the KEMPEROL or KEMPERDUR products, leads to a reduction of the elongation capacity.

Sufficient protection can only be achieved by applying a defect-free and gap-free alkali protective layer to the cured waterproofing or coating. For this purpose, in the case of single-component KEMPEROL or KEMPERDUR products (e.g. KEMPEROL 1K-PUR Sealing, KEMPERDUR Deko etc.) standing times of 3 - 7 days; for two- or multi-component products (KEMPEROL 2K-PUR Sealing, KEMPERDUR Deko 2K, KEMPEROL V 210 M etc.) to wait for a standing time of one day.

After that, it can be applied either the KEMPERTEC EP5 primer or the KEMPERTEC AC Primer . It can be applied in one operation with one saturated coat, consumption at least 400 g/m² (KEMPERTEC AC Primer max. 500 g/m²). Attention: On KEMPEROL V 210 M the alkali protection may only be produced with the KEMPERTEC AC Primer .

Into the still fresh primer (KEMPERTEC EP5 primer or alternatively KEMPERTEC AC Primer) it is performed a covering grain by grain KEMCO NQ 0712 Natural Quartz scattering.

Safer, to avoid imperfections in the protective layer (with transparent primers), it is necessary to apply twice KEMPERTEC EP5 primer or alternatively KEMPERTEC AC Primer consumption in each case at least 200 g/m². The KEMPERTEC EP5 primer can be further coated after approx. 4 hours and the KEMPERTEC AC Primer after approx. 1 hour. Here, the still fresh second coat of the primers is scattered grain by grain with KEMCO NQ 0712 Natural Quartz .

The applied protective layer must harden at 20 °C for at least three days in relation to KEMPERTEC EP5 primer and at least one day in relation to KEMPERTEC AC Primer before an alkaline reacting medium, such as a screed or similar, may be applied. Lower temperatures prolong the hardening period.

Note: This edition supersedes all previous editions of Technical Information 15.

Issued: Vellmar, 2024-03-04

Technical Information 16

Processing aids for the application of KEMPEROL sealants

A. as regards moisture

B. as regards processing temperatures > 5°C

A. as regards moisture

1. KEMPEROL sealants should form a non-positive combination with the substrate. This can be reduced by moisture/water.

2.Moisture can occur as:

- Water on the surface to be waterproofed
- Extremely high air humidity
- Moisture/water in joints (e.g. thermal insulation), expansion joints, cracks, and crevices
- Moisture/water in the area of large blowholes and in the case of large roughness depths on mineral substrates
- Condensate or water accumulation when the temperature falls below the dew point on metallic substrates
- Condensate or water accumulation under stored containers

As described in the relevant regulations (see Rule for sealants/Flat roof guideline/DIN) as well as in the processing guidelines of the company KEMPER SYSTEM, sealants - made of liquid plastics - should adhere to the substrate over the entire surface. This is achieved by appropriate substrate pretreatment of the substrate to be sealed. These measures include blasting a concrete surface to be primed or drying the substrate. These measures are known and familiar. Less well known, but no less important, are the relationships which, due to the formation of condensation on the substrate to be treated, prevent adhesion. This condensation occurs at substrate temperatures below the dew point.

Dew point

Here, the dew point is the surface temperature at which the moisture contained in the ambient air condenses on a surface. This moisture forms a release film and full-surface adhesion is no longer fulfilled. If the temperature falls below the dew point, the work must be stopped.

In principle, there are two ways to determine the dew point:

1. Measurement method:

The dew point can be determined with a measuring device. With these measured values, the dew point can be determined in the following table.

2. Table method: With the measurement of the

a) surface temperature of the surface to be machined,

b) relative humidity,

c) ambient temperature, the dew point can be determined using the table.

Table of dew point temperatures

Air temp.	Dew point temperatures in °C with a relative humidity of										
(°C)	45 %	50 %	55 %	60 %	65 %	70 %	75 %	80 %	85 %	90 %	95 %
2	-7,77	-6,56	-5,43	-4,40	-3,16	-2,48	-1,77	-0,98	-0,26	+0.47	+1.20
4	-6,11	-4,88	-3,69	-2,61	-1,79	-0,88	-0,09	+0.78	+1.62	+2.44	+3.20
6	-4,49	-3,07	-2,10	-1,05	-0,08	+0.85	+1.86	+2.72	+3.62	+4.48	+5.38
8	-2,69	-1,61	-0,44	+0,67	+1,80	+2,83	+3,82	+4,77	+5,66	+6,48	+7,32
10	-1,26	+0,02	+1,31	+2,53	+3,74	+4,79	+5,82	+6,79	+7,65	+8,45	+9,31
12	0,35	1,84	3,19	4,46	5,63	6,74	7,75	8,69	9,60	10,48	11,33
14	2,20	3,76	5,10	6,40	7,58	8,67	9,70	10,71	11,64	12,55	13,36
15	3,12	4,65	6,07	7,36	8,52	9,63	10,70	11,69	12,62	13,52	14,42
16	4,07	5,59	6,98	8,29	9,47	10,61	11,68	12,66	13,63	14,58	15,54
17	5,00	6,48	7,92	9,18	10,39	11,48	12,54	13,57	14,50	15,36	16,19
18	5,90	7,43	8,83	10,12	11,33	12,44	13,48	14,56	15,41	16,31	17,25
19	6,80	8,33	9,75	11,09	12,26	13,37	14,49	15,47	16,40	17,37	18,22
20	7,73	9,30	10,72	12,00	13,22	14,40	15,48	16,46	17,44	18,36	19,18
21	8,60	10,22	11,59	12,92	14,21	15,36	16,40	17,44	18,41	19,27	20,19
22	9,54	11,16	12,52	13,89	15,19	16,27	17,41	18,42	19,39	20,28	21,22
23	10,44	12,02	13,47	14,87	16,04	17,29	18,37	19,37	20,37	21,34	22,23
24	11,34	12,93	14,44	15,73	17,06	18,21	19,22	20,33	21,37	22,32	23,18
25	12,20	13,83	15,37	16,69	17,99	19,11	20,24	21,35	22,27	23,30	24,22
26	13,15	14,84	16,26	17,67	18,90	20,09	21,29	22,32	23,32	24,31	25,16
27	14,08	15,68	17,24	18,57	19,83	21,11	22,23	23,31	24,32	25,22	26,10
28	14,96	16,61	18,14	19,38	20,86	22,07	23,18	24,28	25,25	26,20	27,18
29	15,85	17,58	19,04	20,48	21,83	22,97	24,20	25,23	26,21	27,26	28,18
30	16,79	18,44	19,96	21,44	23,71	23,94	25,11	26,10	27,21	28,19	29,09
32	18,62	20,28	21,90	23,26	24,65	25,79	27,08	28,24	29,23	30,16	31,17
34	20,42	22,19	23,77	25,19	26,54	27,85	28,94	30,09	31,19	32,13	33,11
36	22,23	24,08	25,50	27,00	28,41	29,65	30,88	31,97	33,05	34,23	35,06
38	23,97	25,74	27,44	28,87	30,31	31,62	32,78	33,96	35,01	36,05	37,03
40	25,79	27,66	29,22	30,81	32,16	33,48	34,69	35,86	36,98	38,05	39,11
45	30,29	32,17	33,86	35,38	36,85	38,24	39,54	40,74	41,87	42,97	44,03
50	34,76	36,63	38,46	40,09	41,58	42,99	44,33	45,55	46,75	47,90	48,98

For safety reasons, the surface temperature of the substrate should be 3K above the dew point during coating and sealing work.

3. Substrates should always be dry. Moist surfaces must always dry before working with KEMPEROL seals.

4. If the containers are left outdoors overnight, water may form or accumulate on the containers (e.g. dew, rain). This water must not be allowed to get into the containers when they are opened.

5. Moisture may be present or occur if the nonwoven is not stored properly and in or on the processing tools.

Non-observance may result in blistering of the waterproofing which, depending on the level of moisture, can result in foam formation.

Please contact KEMPER SYSTEM if you have any questions or queries regarding the assessment of the processing conditions or the substrate to be processed.

B. Processing temperatures

The optimum processing temperature of KEMPEROL sealants is in the temperature range between 10 °C and 25 °C. If the temperatures are outside this range, add

1. at low temperatures

- < 10 °C the KEMPEROL 2K-PUR Speedshot for KEMPEROL 2K-PUR Sealing and the KEMCO 1K Thinner at KEMPEROL 1K-PUR Sealing ,
- do not store the material “overnight” open or uncovered on the object,
- store the components in a cool, dry and frost-free place.
- the works are finished in time so that the reaction/hardening can still take place at sufficient temperatures.
- if dew has formed on the surface to be sealed (observe dew point), it may cause foaming and bubbling.

2. at high temperatures:

- > 25 °C must the KEMPEROL V 210 M the KEMPEROL UP-I inhibitor be mixed in
- the mixed container can be divided for parallel processing or smaller container sizes can be used.
- as there is no product to extend the working time for the sealing materials , and there the material should not be stored in the sun (possibly cover with light-colored foil).

Note: This edition supersedes all previous editions of Technical Information 16.

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Technical Information 21 – Checking – Assessing – Preparing the substrate

General

The most important requirement for the success and long-term adhesion of KEMPER SYSTEM products is the bond with the substrate and its testing, assessment and preparation. Ignoring this requirement is the most common cause of defective workmanship, defects and complaints.

Balconies, terraces and patios can have many different substrates, e. g. old ceramic tiles, mastic asphalt, old paint, concrete or screeds. According to the requirements of DIN 18365 “Flooring works”, any substrate that is to be waterproofed must be firm, clean and free from all loose material, dust, dirt, oil and grease.

According to the German Contract Procedures for Building Works (VOB), the contractor must test the substrate to ascertain its suitability for the specified covering. The contractor should inform the client immediately in writing if he has any doubts about the suitability of the substrate for the specified works.

Checking the moisture content of the substrate

In the case of a fresh cement screed or concrete surfaces, a coating is not possible until the residual moisture of the material has dropped below 5%. This is usually not until 28 days after laying the screed or placing the concrete.

In the case of substrates in contact with the soil, they must be adequately isolated against groundwater and rising damp (capillary moisture), e. g. by means of a layer of gravel (filter) plus a damp-proof membrane (dpm). So-called waterproof concrete and waterproofing screeds do not represent adequate protection because they are still permeable to water vapour.

A chilled mirror hygrometer can be used to measure the moisture content. Rising damp can be checked by covering an area of approx. 1 m^2 with dense polyethylene sheeting. If the covered area turns a dark colour within 24 hours, rising damp is to be expected.

All residual moisture contents of 5% stated in the technical data sheets refer to the measurement with the CM device.Thus, the given values are in mass%.

Checking the strength of the substrate for concrete/screed

In all cases, the substrate must possess adequate strength.

Determine the compressive strength of concrete and bonded screeds with a rebound hammer (Schmidt hammer). They should have a value of min. 30 N/mm^2. The pull-off strength is determined with an adhesive strength tester. The average value must be 1.5 N/mm^2, the lowest value 1.0 N/mm^2. KEMPEROL waterproofing systems are elastic, have a high inherent strength and can bridge over cracks, but as they are very thin (approx. 2 mm), they cannot perform a load-distributing function.

Preparing the substrate

The substrate should be prepared in such a way that a permanent, strong bond is achieved between the system to be applied and the substrate.

To achieve this, the substrate must be consistently firm and free from all separating substances, sharp edges, burrs, flashes, fins, etc.

The choice of a suitable preparatory method depends on the condition of the existing surface, the specification and the waterproofing system to be applied.

Besides the “traditional” methods of treatment

- grinding (grinder)
- cutting (angle grinder, floor saw)
- chiselling (chisel)
- hammering (chisel scaler, needle gun)
- brushing (brush, rotary brushes, brush machine)
- planing (planer)
- sweeping (broom, magnetic broom, sweeping machine)
- blowing off (hot/warm air)
- vacuuming (industrial vacuum cleaner)

...but also the following cleaning and blasting methods...

- water-jet cleaner up to 5 N/cm ^{2} (0.5 bar)
- steam cleaners up to 5 N/cm^2 (0.5 bar)
- High-pressure water-jet cleaners up to 4000 N/cm^2 (400 bar)
- Wet-blasting equipment with blasting medium recovery
- Wet mist abrasive sandblasting equipment
- Wet abrasive sandblasting equipment
- Dry-blasting equipment with blasting medium recovery
- Free-jet pressure equipment
- Flame cleaning to DVS 0302
- Liquid nitrogen cleaning
- Infrared radiation

are also described in publications (ZTV-SIB / DAfStb).

Cleaning methods using solvents are also still in use, particularly in the case of greasy or atmospheric pollution and/or flexible synthetic sheeting.

Preparing the substrate

1. Flatness of substrate

The flatness of the substrate is based on DIN 18202 “Dimensional tolerances in building construction”.

Unevenness and irregularities cannot be compensated for by the KEMPERTEC primer to be applied and therefore require special treatment. High spots must be removed and low spots filled with KEMPER SYSTEM Filling Compound or Repair Mortar.

In this case filling compound is used after applying the primer. The filling compound consists of mixture of

- KEMPERTEC EP5 primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 2 or
- KEMPERTEC AC Primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 3.

The filling compound is used for unevenness in the range 2–6 mm.

The repair mortar is likewise used after applying the primer. The mortar consists of a mixture of

- KEMPERTEC EP5 primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 5 or
- KEMPERTEC AC Primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 10.

The repair mortar is used for unevenness in the range 6–20 mm.

Minor chipping or spalling, such as joint edges, can also be levelled with the repair mortar. Depending on the application and external conditions, the mixing ratio of quartz sand to binder can be varied, thus optimizing the application. See also the technical data sheets KEMPERTEC AC Primer or KEMPERTEC EP5 primer.

The levelling layer has to be scattered with KEMCO NQ 0408 Natural Quartz.

2. Soiling

KEMPERTEC primers do not adhere well, if at all, to soiled substrates. Therefore, the surfaces must be thoroughly cleaned wet or dry depending on the type of soiling with, for example an industrial vacuum cleaner, high-pressure water jets, KEMCO MEK Cleaning Agent, scouring machines or flame cleaners.

Any bitumen or products containing creosote adhering to the substrate must be removed completely by planing or blast-cleaning.

3. Porous and loose constituents

Cement laitance, cement flakes, mortar residue and all surface constituents, e. g. old paint, that are not permanently attached to the substrate must be removed by chiselling, planing, blast-cleaning or grinding prior to applying the primer and can be levelled as described under point 1 above.

4. Cracks in the substrate

On substrates with a cement binder a network of surface cracks does not have any detrimental effect on KEMPER SYSTEM waterproofing systems; however, greater consumption of primer must be allowed for because the substrate must be fully saturated.

Continuous shrinkage cracks and other cracks resulting from structural movements must be assessed on a case by case basis according to the state of the art and can be filled using appropriate methods.

5. Joints in the substrate

Joints the substrate should be straight, with a consistent width and stable edges.

Any damage can be made good with repair mortar.

6. Voids

In the case of voids, e. g. under old ceramic tile finishes, the tiles must be removed and the void must be made good with a similar material. Repair mortar can also be used to level such unevenness. To achieve flatness / slope of the substrate please refer to the relevant rules and standards.

7. Metal surfaces

Metals must generally be intensively cleaned and degreased with KEMCO MEK Cleaning Agent before priming / coating works. After that, the surfaces must be roughened mechanically. The more noble the metal, the more intensive the roughening must be.

8. Windows and door joints

Connection areas made of PVC must be cleaned with KEMCO MEK Cleaning Agent before priming / coating works and the surface lightly roughened evenly with sandpaper grain size approx. 80 to 100.

9. Data sheets and standards to be observed:

- DIN 18299 – General technical specifications for building works; general rules for all kinds of building works
- DIN 18336 – General technical specifications for building works; Waterproofing works
- DIN 18352 – General technical specifications for building works; Tile laying works
- DIN 18353 – General technical specifications for building works; Floor screed works
- DIN 18365 – General technical specifications for building works; Flooring works
- DIN 18202 – Dimensional tolerances in building construction – buildings
- DIN 18531-18535 - Waterproofing of buildings (terms)
- Flat roof standards
- Installation of slope according to ZDB
- ZTV-ING
- KEMPER SYSTEM technical data sheets
- KEMPER SYSTEM application instructions

Note: This edition supersedes all previous editions of Technical Information 21.

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Technical Information 22- Processing of KEMPERTEC, KEMPEROL and KEMPERDUR AC products

1. Substrate Check – Definition of adhesion.

For all substrates specified in the primer recommendation for KEMPEROL AC Speed or KEMPERDUR AC coating are marked with the term “single test”, a test can be carried out on site (for plastic-modified screeds, waterproof concrete, metals and ceramic coverings) by placing “adhesive seals”.

The adhesion test is carried out as follows:

- a small quantity KEMPERTEC AC Primer or KEMPERTEC AC M-Primer (approx. 250 g)
- with corresponding quantity KEMPEROL CP catalyst powder (approx. 1 teaspoon from a bag of 20 g)
- approx. 30 weight % at KEMCO NQ 0712 Natural Quartz (alternatively KEMPERTEC KR Quartz Sand Mixture)

This mixture must be applied as a mound on the prepared substrate to be tested. On different or inhomogeneous substrates several mounds must be applied.

After hardening of the seal - about 30 minutes after adding the KEMPEROL CP catalyst powder - it can be knocked off with a hammer.

The following break patterns may occur:

- A break in the substrate (cohesive failure) → good adhesion
- A break in the mound (cohesive failure) → good adhesion
- A break between the mound and the substrate (adhesive failure) →no adhesion
- A failure in the curing process →no adhesion

A better adhesion can be achieved when the substrate has been suitably prepared (refer to Technical Information TI 21: Substrate Assessment. After preparation of the surface, the test must be repeated.

If failures in the curing process still consist the system cannot be applied.

2. Compatibility of the KEMPEROL AC products with KEMPERTEC primers

Due to the raw material basis of the KEMPEROL AC products (methyl methacrylate), there is no compatibility with the KEMPERTEC primers:

- KEMPERTEC R Primer,
- KEMPERTEC EP5 primer,

there is not. It can lead to a dissolution or softening of the KEMPERTEC primers and subsequent hardening problems of the KEMPEROL AC products.

In general, when processing under KEMPEROL AC products, only the KEMPERTEC AC Primer or the KEMPERTEC AC M-Primer should be used.

3. Processing of KEMPEROL / KEMPERDUR AC products in indoor areas

If KEMPEROL / KEMPERDUR AC products are used in indoor areas or poorly ventilated outdoor areas, the following points should be noted:

- Ensure sufficient ventilation; if necessary, use additional
- technical equipment to guarantee a sufficient exchange of air
- Always wear personal protective equipment (PPE).
- Monitor the occupational exposure limits in the working area and adjacent rooms.
- Ensure working area preparation prevents unpleasant smells or solvent vapours entering adjacent rooms.
- Always use explosion-proof equipment to apply products.
- Requirements of the German Employers’ Liability Insurance Association (GISBAU) should be respected.

Insufficient or poor ventilation may result in methyl methacrylate-based products failing to cure correctly in surface areas. The surface is likely to remain permanently soft and cause long-term odour-related problems.

If methyl methacrylate-based products are to be applied in public buildings, we recommend carrying out the relevant work after seeking approval from the relevant building control body (submission of safety data sheets, user instructions, etc.) and during closing hours.

Please also observe the publication of the Committee of German Federal States for Occupational Health and Safety (LASI) LV 19, “Coating industrial floors and other large indoor areas with methyl methacrylate” as well as the progress report of the Deutsche Bauchemie e.V. “Methacrylic resins in the construction industry and the environment”.

Note: This edition supersedes all previous editions of Technical Information 22.

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Technical Information 23 – Application of products containing solvents

If porous or absorbent substrates (concrete < C12/15 (B15), concrete with lightweight aggregates, aerated concrete blocks, sand-lime bricks, aerated concrete, brick, wood, etc.) that are adjacent to used interior spaces are to be provided with a KEMPEROL waterproofing system or KEMPERDUR coating system, the following points must be observed:

- The use of solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products directly on porous or absorbent substrates is not permitted! (possibility of solvent odors in the interior).
- Check whether the use of solvent-free products is possible.
- In general, all imperfections (e.g. open joints, gaps, etc.) or large break-outs must be sealed before starting work!
- If products containing solvents are nevertheless to be used, the substrate must be treated with the solvent-free KEMPERTEC EP5 primer pore-sealing and fully covering priming (two layers) and sanding of the second layer!
- Solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products must only be applied in the layer thickness described in the technical data sheet.
- Solvent-based KEMPEROL, KEMPERDUR resp. KEMPERTEC products may be used in the indoor areas or in the area of the intake of air conditioners / fans, windows, doors, etc. only in compliance with all the safety precautions (shutdown of the air conditioning, use of supply and exhaust devices, etc.)!
- Inform residents and occupants about the work early and comprehensively!

Solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products are:

- KEMCO 1K Primer
- KEMPERTEC FPO Primer
- KEMPEROL 1K-PUR waterproofing
- KEMPEROL BR M Waterproofing
- KEMPEROL V 210 M waterproofing
- KEMPEROL FALLSTOP
- KEMPERDUR Deko
- KEMPERDUR Deko transparent
- KEMPERDUR Finish matt
- KEMPERDUR Finish glossy
- KEMCO MEK Cleaning Agent

Note: All previous Technical Information 23 become invalid with the publication of this edition.

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Technical Information 24 - Cleaning and maintenance of KEMPEROL sealants and KEMPERDUR coatings

Please observe the following instructions for the cleaning and care of surfacings and waterproofings by KEMPER SYSTEM:

- KEMPEROL sealants and coatings can be cleaned with commercially available floor cleaning or care products. Please observe the manufacturer's instructions for use and dosage very carefully.
- The surface is cleaned using an all-purpose cleaner (neutral or alcohol-based cleaners) which are diluted in water. After cleaning, all treated surface must be rinsed with clean water to remove deposits of dissolved contaminations. Do not use acidic or solvent based cleaning agents or e.g. abrasive cleaners.
- Highly concentrated ("sharp") cleaning agents and disinfectants as well as corrosive sanitary cleaners are not suitable as they may cause the KEMPEROL or KEMPERDUR surfaces to dissolve.
- Some window cleaning agents contain solvents which can attack the surfacing or cause discoloration. Therefore avoid excessive splashing when cleaning windows with such products and always remove all traces of such cleaning agents from the waterproofing or surfacing.
- Do not clean the surface mechanically (e. g. with a metal brush, scraper).
- High-pressure cleaners or mechanical cleaning equipment should only be used occasionally and the maximum pressure must not exceed 80 bar for KEMPEROL sealants and 40 bar for KEMPERDUR coatings, otherwise spalling may occur (Furthermore, a distance of at least 20 cm between the nozzle and the substrate must be maintained).
- Reposition plant tubs etc. at regular intervals in order to prevent marking and discolouring the surface underneath.
- If the surface is covered with algae, special algae removal agents (e.g. Hotrega Green Fouling Remover, Technolit Green Fouling Remover Concentrate, etc.) can be used.

Note: This edition supersedes all previous editions of Technical Information 24.

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Technical Information 29 – Slip resistance classes

A) Regulations and tests

DIN 51 130: Testing of floor coverings - Determination of anti-slip properties

B) Design

The following results of the slip resistance tests were achieved with the consumption quantity specified in the respective technical data sheet. If the consumption is exceeded and/or the processing method is changed (e.g. rubber slider instead of roller), lower slip resistance values than documented in the test certificate are achieved due to the leveling of the surface**.**

Once the coating work has been completed, the slip resistance will change depending on the type and duration of the traffic load applied.

C) Slip resistance of the system superstructures

The specified R classes only apply to the system structures specified here.

Class	Waterproofing	Coating	Surface sealing
R 9	KEMPEROL 2K-PUR	KEMCO Decor Stone / Natural Stones with KEMCO QB1 Binder	
R 10	KEMPEROL 2K-PUR	KEMPERDUR Deko 2K with chip scattering	KEMPERDUR Finish with KEMPERDUR ASG granulate rh
R 10	KEMPEROL 1K-PUR	KEMPERDUR Deko with chip scattering	KEMPERDUR Finish with KEMPERDUR ASG granulate rh
R 10	KEMPEROL AC Speed	KEMPERDUR AC coating	KEMPERDUR AC-Finish with KEMPERDUR CS Microchips
R 10	KEMPEROL 2K-PUR	KEMPERDUR HB thick coating with chip scattering	KEMPERDUR Finish with KEMPERDUR ASG granulate rh
R 11	KEMPEROL 2K-PUR	KEMPERDUR® TC as a rolling layer with KEMCO NQ 0408 Natural Quartz	KEMPERDUR EP-Finish
R 11	KEMPEROL AC Speed	KEMPERDUR AC Park+	
R 12	KEMPEROL 1K-PUR	KEMPERDUR quartz coating	KEMPERDUR Deko transparent
R 12	-	KEMPERDUR AC Park with KEMCO NQ 0408 Natural Quartz	KEMPERDUR AC-Finish colored
R 12	-	KEMPERDUR AC Park with KEMPERDUR CQ 0408 Colorquarz	KEMPERDUR AC-Finish transparent
R 12	-	KEMPERDUR EP-Finish with KEMCO NQ 0408 Natural Quartz	
R 13	KEMPEROL 2K-PUR	KEMPERDUR® TC as a rolling layer with KEMCO NQ 0712 Natural Quartz	KEMPERDUR AC-Finish

Note: All previous Technical Information 29 become invalid with the publication of this edition.

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our products, but only if our respective product has been used and processed in accordance with our processing guidelines in the technical data sheets. The proper and professional processing of our products is therefore the sole responsibility and liability of the user (processor). Our products are sold exclusively on the basis of our terms and conditions of sale and delivery.

For all technical data sheets, the original German version of this document shall prevail exclusively. No liability is assumed for translation errors.

Technical information 30 - Processing of KEMPEROL 2K-PUR waterproofing in the vertical direction

When using KEMPEROL in the verticals of containers, tanks, shafts or water collection basins etc., care must be taken to ensure that solvent-free systems are always preferred. For KEMPER SYSTEM products, this corresponds to the KEMPERTEC EP5 primer and the KEMPEROL 2K-PUR waterproofing.

However, care must be taken to ensure adequate ventilation. The respective H- and P-phrases should be observed.

When planning waterproofing, it is necessary to distinguish whether the container is always filled with water or not. If the container is sometimes empty, make sure that water under external hydrostatic pressure cannot reach the inner surface of the waterproofing, as there is otherwise a risk of bubble formation in the liquid-applied waterproofing. There is no risk of this if the container is always filled with water (internal pressure).

Cement-based substrates, such as concrete, of adequate grade can be used as substrates. Substrate prerequisites and preparation are described in detail in Technical Information 21 which must be respected.

The KEMPERTEC EP5 primeras well as a quartz sand spreading is applied first. Please note that the primer must be applied vertically until the pores and capillaries are sealed. Depending on the substrate, several priming processes may be necessary. The quartz sand thrown in should protrude enough from the primer to create a uniformly rough and non-slip surface. The consumption of the primer should not be less than 300g/m².

Deeper cavities, voids or shrinkage holes can be filled or levelled out with a filling compound during the priming stage.

The mixing ratio is described in the TM of the KEMPERTEC EP5 primer .

The KEMPERTEC EP5 primer can be recoated after at least 4 hours.

The first thing to do with the waterproofing work is to seal details such as inlets and outlets, corners and edges. Transition areas from floor to wall surfaces and internal and external corners must also be carried out before surface waterproofing. For this purpose, KEMPEROL 165 fleece must be used in a width of at least 20 cm.

Various fleece solutions are possible for surface waterproofing. It basically depends on the shape and height of the container.

With up to 2 m high containers, it is advisable to install the fleece from top to bottom. It is advantageous if the fleece is cut ready for use in advance and rolled up carefully.

Conversely, the fleece should be applied from bottom to top in containers above 2 m. However, the fleece should still be cut to a maximum length of 2m ready for use in advance. It is of course also possible to leave the fleece on the original roll if an adequate guide is used. This guide could consist of two pieces of wood of the same height as the container being waterproofed into which nails are inserted at 10 to 15 cm intervals in a sawtooth pattern. Then you can use a broom handle (or similar tool) to hook the fleece roll to the nails at the corresponding height.

When waterproofing, irrespective of the fleece solution, it is essential to apply a first coat and second coat of liquid-applied waterproofing to the fleece. The fleece must be sufficiently saturated with the waterproofing agent and any air bubbles completely removed. Special attention should be paid to fleece overlapping and fleece cross joints. The risk here lies in the formation of water-bearing channels due to incorrectly installed fleece.

The viscosity of our KEMPEROL 2K-PUR waterproofing is set in the factory so that vertical surfaces in joining areas can be easily sealed. If vertical surfaces have to extend past the terminal areas, e.g. complete wall surfaces to be sealed with KEMPEROL 2K-PUR the addition of KEMCO TX Thixotropic Additive is recommended. The addition of KEMCO TX Thixotropic Additive increases the viscosity of KEMPEROL 2K-PUR. The run down of the sealing compound is thereby limited, or the application of the material pre-layer is much easier. Also recommended is the use of KEMPEROL 165 fleece in smaller widths of 52.5cm resp. 70cm. The use of 105cm fleece is possible, but requires a lot of experience in handling and maneouvring of KEMPEROL seals and corresponding staffing resources.. For one person alone, the processing of KEMPEROL 165 fleece in 105cm width on wall surfaces presents a problem.

Another relief is, only the material pre-layer of KEMPEROL 2K-PUR too thixotropic, but not the material after-layer, since the distribution of the added mass is made difficult due to the higher viscosity. The application of the material after-coating is easier without the addition of KEMCO TX Thixotropic Additive easier.

Dosing and processing:

The ideal amount of the addition of KEMCO TX Thixotropic Additive to KEMPEROL 2K-PUR waterproofing is within the tolerance of 1.0 - 1.25 mass percent. This results in the addition of one bag of 150g when using 12.5kg working pack (packing unit 4 bags of 150g each in a cardboard box). In the case of smaller containers, e.g. 5 kg working pack (2 x 2.5 kg in a kneading bag) or partial withdrawals, the quantities must be determined and weighed accordingly. The time required for the mixing process must also be taken into account. In principle, a mechanical mixing version (slow-running stirrer with circular stirrer basket or spiral stirrer basket) should be provided. A uniformly creamy or homogeneous sealing compound cannot be guaranteed by mixing by hand (stirring stick). For 12.5 kg containers, the mixing process should be estimated at approx. 5-8 minutes, therefore the KEMCO TX Thixotropic Additive should always be mixed into the base component A of before the hardener component B is added.

The addition of KEMCO TX Thixotropic Additive according to the procedure described above has no influence on other product properties except for the fact that becomes more viscous (see the technical data sheet KEMPEROL 2K-PUR waterproofing).

Note: This edition supersedes all previous editions of Technical Information 30.

Issued: Vellmar, 2024-03-04

Technical Information 33 – Processing of KEMPEROL AC Speed / AC Speed+ waterproofings at temperatures below +5°C

KEMPEROL AC Speed can be produced even in adverse weather conditions, in relation to temperatures. KEMPEROL AC Speed hardens even at temperatures **down to -5°C** with addition of 4% KEMPEROL CP catalyst powder without any problems. As a restriction, it must always be taken into account that the substrate temperature must be 3°C or 3K above the dew point.

When application is carried out at temperatures below the freezing point up to max. -5 °C, the substrate should be free from ice, frost, snow and freezing rain.

Further requirements placed on the substrate (“Moisture”) are described in detail in Technical Information 21 “Testing-Assessing-Preparing the Substrate” (TI21).

Please note that low temperatures may have an impact on the product characteristics, e.g. pot life, application time, resistance to rain and curing. As a general rule, the colder the weather, the longer the chemical process takes.

However, this does not have a negative impact on the technical parameters of the KEMPEROL AC Speed in terms of functionality.

The above information also applies to the KEMPERTEC AC Primer, KEMPERTEC AC M-Primer and the KEMPERTEC AC Jointing compound.

Note: This edition supersedes all previous editions of Technical Information 33.

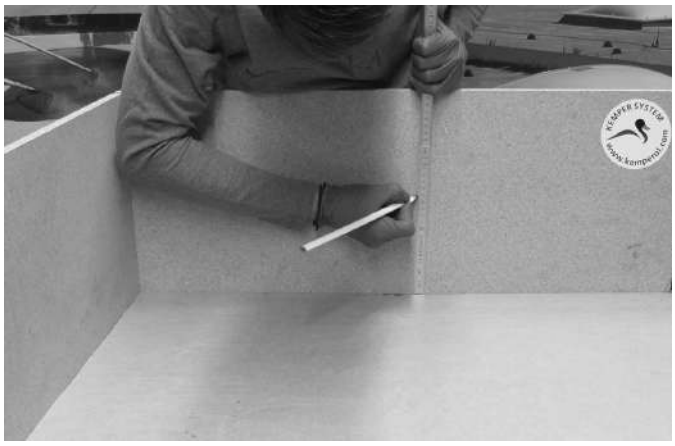
Issued: Vellmar, 2024-03-04

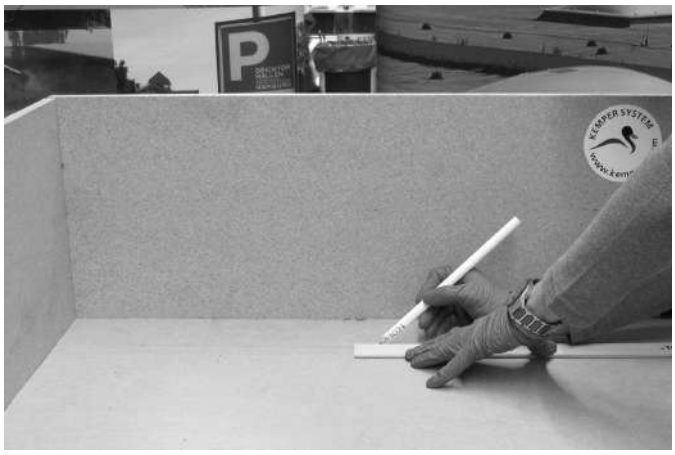
Technical information 34 - Correct masking of the surface to be treated with KEMPEROL

Masking the surface to be machined

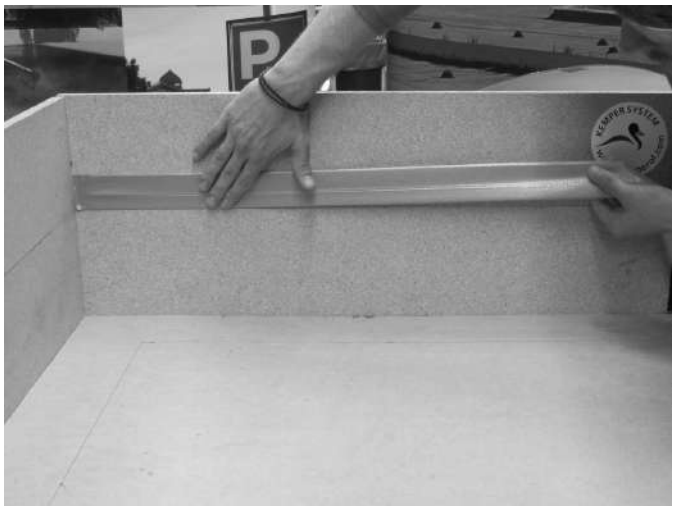
In order to obtain a clean edge seal, it is imperative to mark the areas to be sealed and to tape the waterproofing boundaries with a fabric tape (armor tape) before applying the KEMPEROL products. It must be checked whether the existing substrate can absorb the strongly adhesive fabric tape without causing damage to the substrate when it is subsequently removed.

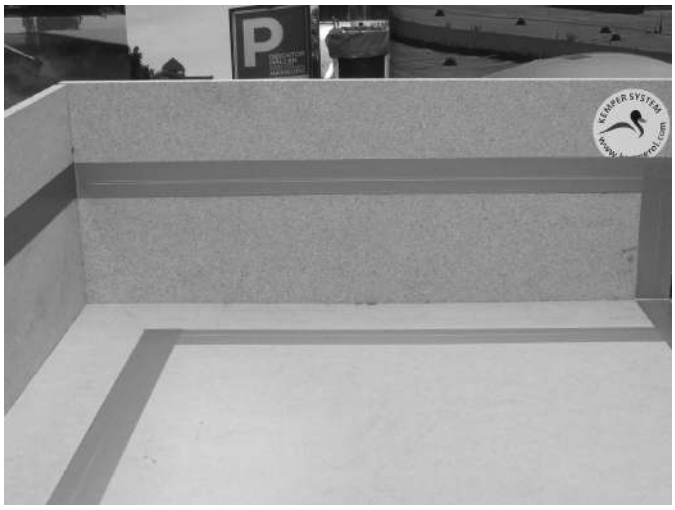
Step 1: Measuring and marking





Step 2: Masking the marked area with fabric tape (armor tape)



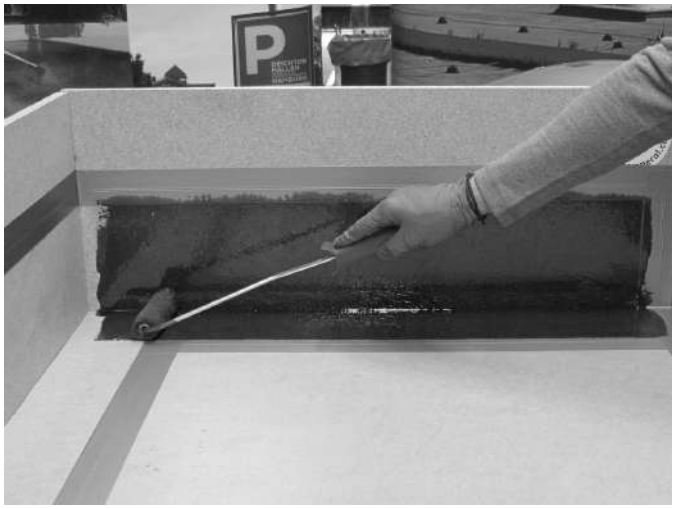


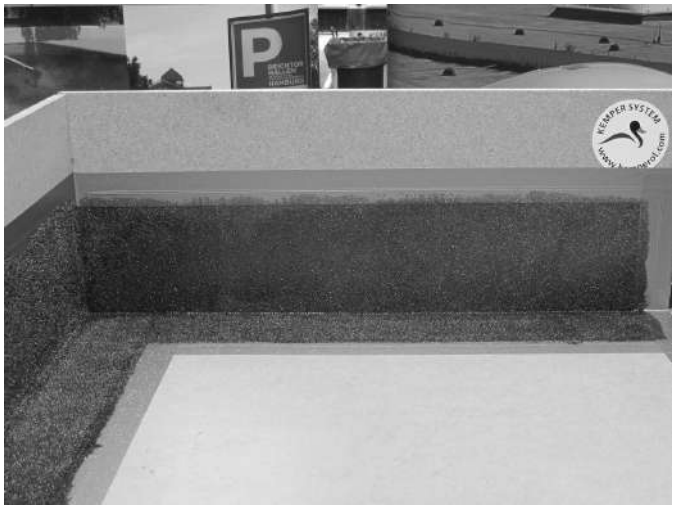
When masking, press down the fabric tape and finally smooth it out by hand to avoid material running underneath.

Step 3: Application of KEMPERTEC primer (if required)

For the application of KEMPERTEC primer, please refer to the respective technical data sheet.

The processing guidelines must be observed and complied with.

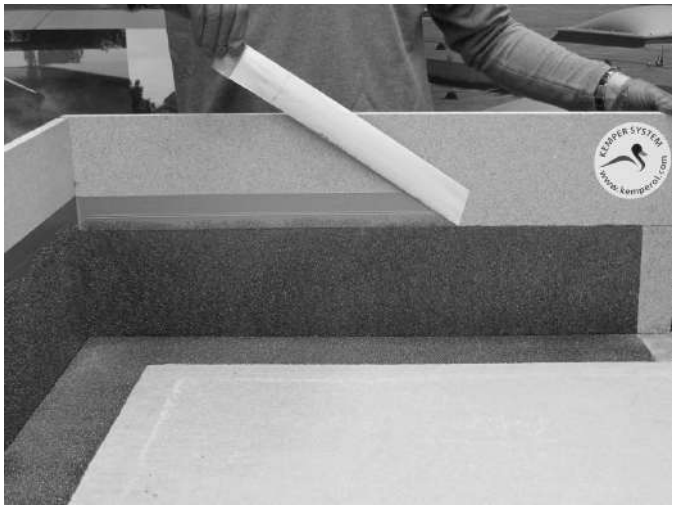


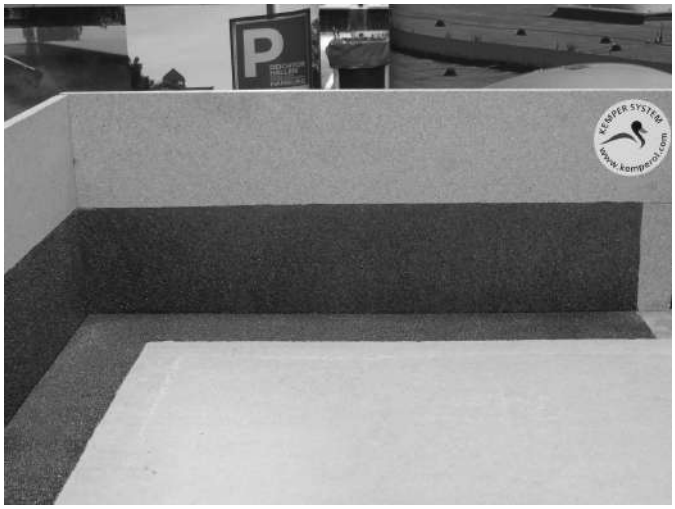


Step 4: Remove the fabric tape (armor tape)

The fabric tape (armor tape) must be removed immediately after application of the primer to prevent damage to the KEMPERTEC primer.

Make sure that the fabric tape (armor tape) is pulled upwards from the still wet KEMPERTEC primer.





Before sealing works with KEMPEROL waterproofing, it is necessary to mask again. Here, a new fabric tape of about 1-2 mm above the KEMPERTEC primer must be applied.

Here, too, the fabric tape must be removed before the KEMPEROL waterproofing hardens.

Note: All previous Technical Information 34 become invalid with the publication of this edition.

Issued: Vellmar, 2024-03-04

General information

Changes to the colour caused by weather conditions and/or UV rays do not influence the technical parameters. The times given above are reduced with higher and increased with lower ambient and substrate temperatures. KEMPER SYSTEM products must not be mixed with other manufacturers´ products.

Our technical data sheets / technical information and application instructions reflect the current level of knowledge in our company and the experience with our products. In each case, the new edition supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practise. The latest version can be retrieved from the KEMPER SYSTEM Login section. When using our products, a detailed, object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults, and this only if our relevant product has been used and applied according to the instructions in our technical data sheets. Correct application of our products therefore falls entirely within the scope of liability and responsibility of the user (contractor). Our products are sold exclusively on the bases of our conditions of sale and delivery.

Working time - pot life:

The pot life of a reactive material denotes the length of time for which the product remains usable. It is also occasionally referred to as “usable life”. It is the time between beginning to mix a multi-component product (or from the moment of opening the container in the case of a single-component product) and the end of its usability, in other words the length of time during which the substance can still be “taken out of the pot”. The end of the pot life is usually indicated by a noticeable rise in the viscosity (increase in stickiness), which prevents further proper use of the product. Pot life and working time are generally not the same thing for our products! The reason for this is that the pot life is determined by means of a viscometer upon reaching a defined viscosity, but this is greater than the working time relevant in practice. Quite obviously, a change in the viscosity has a considerable influence on the penetration and saturation behaviour (with respect to the substrate or fleece). At the end of the pot life the viscosity of a product is so high that it is no longer possible to use it properly or to achieve an adequate bond with the substrate. Therefore, our working times are approx. 3–5 minutes shorter than the pot lives as measured. As a rule of thumb, a product whose viscosity is clearly greater than that of liquid honey (~ 10000 mPas) should no longer be used. This specifies the minimum length of time before a subsequent coat or wearing course can be applied. This length of time is determined by an adequate strength or degree of curing being achieved but also by the release (evaporation) of any solvents present in the product. Depending on the weather conditions, any additional covering should be applied within 14 days.

This indicates the time period for the earliest possible application of a subsequent protective / wear layer. This period is determined on the one hand by the achievement of sufficient strength or hardening and on the other hand by the outgassing (evaporation) of solvents that may be necessary. Depending on the weather, subsequent coats should be applied within a period of 14 days.

Sanding:

Sanding of two-component primers is generally recommended. Sanding is mandatory for all epoxy resin-based products (KEMPERTEC EP Primer / KEMPERTEC EP5 primer). By sanding the primer with natural quartz (at least 2.0 kg / m²), a surface with appropriate roughness is achieved, which ensures an optimum adhesion bond with the subsequent layer. As a secondary task, sanding also protects the primer from UV radiation - especially if longer work interruptions (longer than 14 days) are necessary.

Products:

KEMPERTEC - primers are designed for aging resistance - UV resistance is usually not existing. KEMPEROL sealant products are designed for aging resistance or UV resistance and our decorative KEMPERDUR products for UV resistance and color fastness.

UV radiation resistance:

The ageing resistance with respect to light (UV radiation) in accordance with ETAG 005 has been verified for our waterproofing products.

Colour fastness:

The durability and constancy of the colour when exposed to (UV) light and environmental influences (“non-fading”).

Yellowing:

As no non-fading raw materials are used in our waterproofing products, “yellowing” is possible depending on the degree of weathering and the effects of UV radiation, but this does not impair the function of the waterproofing.

Performance levels for liquid-applied roof waterproofings according to ETAG 005

Performance levels

Classes	Abbreviation	Performance levels
Climate zone	M	temperate climate
	S	extreme climate
Expected utility duration*	W1	5 years
	W2	10 years
	W3	25 years
Work load	P1	low load
	P2	moderate stress
	P3	normal load
	P4	special load
Roof inclination	S1	< 5 %
	S2	5 % to 10 %
	S3	10 % to 30 %
	S4	> 30 %
Lowest surface temperatures	TL1	+ 5°C
	TL2	- 10°C
	TL3	- 20°C
	TL4	- 30°C
Highest surface temperatures	TH1	+ 30°C
	TH2	+ 60°C
	TH3	+ 80°C
	TH4	+ 90°C

* The utility class is an estimate of the utility duration based on the results of durability tests in accordance with ETAG 005. For utility class W3, at least 5 years of practical experience must be proven.

Overview of the performance levels of KEMPEROL waterproofings

KEMPEROL water-proofings	Performance levels							
	W2	W3	P3	P4	TL3	TL4	TH3	TH4
KEMPEROL V 210 M / BR M	X	X	X	X	X	X	X	X
KEMPEROL 1K-PUR	X	X	X	X	X	X	X	X
KEMPEROL 2K-PUR	X	X	X	X	X	X	X	X
KEMPEROL 1K-SF	X	X	X	X	X	X	X	X
KEMPEROL AC Speed	X	X	X	X	X	X	X	X
KEMPEROL PU Aqua	X	X	X	X	X	X	X	X

Resistance list from A to Z

Tabular overview of the chemical resistance of

unsaturated polyesters (UP)

- KEMPEROL V 210 M
- KEMPEROL BR M

one-component polyurethans (1K-PU)

- KEMCO 1K Primer
- KEMPERTEC R Primer
- KEMPEROL 1K-PUR waterproofing
- KEMPERDUR Deko
- KEMPERDUR Finish glossy
- KEMPERDUR Finish matt
- KEMCO QB1 Binder

two-component polyurethans (2K-PU)

- KEMPEROL 2K-PUR waterproofing
- KEMPERDUR Deko 2K
- KEMPERDUR HB thick coating
- KEMPERDUR TC coating

Polymethyl methacrylates (PMMA)

- KEMPERTEC AC Primer
- KEMPERTEC AC M-Primer
- KEMPEROL AC Speed
- KEMPEROL AC Speed+ Waterproofing
- KEMPERDUR AC coating
- KEMPERDUR AC Park
- KEMPERDUR AC-Finish

epoxy resins (EP)

- KEMPERTEC EP5 primer
- KEMCO POX 2K Primer
- KEMPERDUR EP-Finish

State: Vellmar, 2024-03-28

Media	firm	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
Acetone			x	–	–	–	–	–
Battery acid		x		o	o	o	+	+
Aluminum chloride solution 30%		x		+	+	+	+	+
Formic acid < 30%		x		o	o	o	o	o
Formic acid 31-85%		x		–	–	–	–	–
Ammonia solution < 10%		x		–	–	–	+	+
Ammonium chloride	x	x		+	+	+	+	+
Ammonium carbonate	x	x		+	+	+	+	+
Ammonium perchlorate	x	x		o	o	o	+	+
Ammonium phosphate	x	x		+	+	+	+	+
Ammonium sulphate	x	x		+	+	+	+	+
Barium chloride	x	x		+	+	+	+	+
Barium hydroxide	x			o	o	o	+	+
Barium hydroxide solution		x		–	–	–	+	+
Barium nitrate	x	x		+	+	+	+	+
Gasoline			x	o	o	o	o	+
Succinic acid	x	x		+	+	+	+	+
Beer			x	+	+	+	+	+
Lead acetate	x	x		+	+	+	+	+
Bleaching lye			x	–	–	–	–	o
Borax	x	x		+	+	+	+	+
Boric acid		x		+	+	+	+	+
Hydrobromic acid		x		o	o	o	+	o
Butanal			x	–	–	–	–	–
Butanol			x	o	o	o	+	+
Butyric acid			x	–	–	–	+	o
Butyl acetate			x	–	–	–	–	+
Calcium chloride	x	x		+	+	+	+	+
Calcium formate	x	x		+	+	+	+	+
Calcium hydroxide	x			+	+	+	+	+
Calcium hydroxide solution		x		–	–	–	+	+
Calcium hydroxide humid		x		–	–	–	+	+
Calcium nitrate	x	x		+	+	+	+	+
Sodium hypochlorite			x	o	o	o	o	o
Chloroacetic acid	x	x		–	–	–	–	–
Chlorinated lime	x			o	o	o	o	o
Chloroform			x	–	–	–	–	+
Chlorinated water		x		o	o	o	o	o
Chlorinated water (swimming pool)		x		+	+	+	+	+
Chromic acid 10%		x		–	–	–	–	–
Cobalt chloride	x	x		+	+	+	+	+
Cobalt nitrate	x	x		+	+	+	+	+
Potassium cyanide	x	x		+	+	+	+	+
Cyclohexanol			x	o	o	o	+	+
Cyclohexanon			x	o	o	o	–	o
Dibutylphthalate	x			o	o	o	o	+
Di-octylphthalate	x			o	o	o	o	+
Fertilizers	x	x		o	o	o	o	o
Ferric(III)-chloride solution		x		+	+	+	+	+
Ferric chloride	x	x		+	+	+	+	+
Ferrous sulphate	x	x		+	+	+	+	+

Media	firm	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
Ferrous sulphate humid		x		+	+	+	+	+
Acetic acid < 10%		x		o	o	o	+	+
Acetic acid conc.			x	–	–	–	–	–
Ethanol < 50%			x	o	o	o	+	o
Ethanol conc.			x	–	–	–	+	o
Ether			x	o	o	–	–	–
Ethyl acetate			x	–	–	–	–	o
Ethylglycolacetate			x	–	–	–	–	o
Hydrofluoric acid 10-14%			x	–	–	–	–	–
Formaledhyde 30-40%			x	o	o	o	–	+
Glucose	x	x		+	+	+	+	+
Glycerin			x	+	+	+	+	+
Glycol			x	o	o	o	+	o
Urea	x	x		+	+	+	+	+
Heating oil			x	+	+	+	+	+
Isopropyl alcohol			x	o	o	o	+	o
Caustic potash 10%		x		–	–	–	+	+
Caustic potash 10-50%		x		–	–	–	o	+
Caustic potash conc.		x		–	–	–	–	+
Potassium bromate	x	x		o	o	o	+	+
Potassium carbonate	x	x		+	+	+	+	+
Potassium chlorate	x	x		o	o	o	+	+
Potassium chloride	x	x		+	+	+	+	+
Potassium chromate	x	x		o	o	o	+	+
Potassium fluoride	x	x		+	+	+	+	+
Potassium iodide	x	x		+	+	+	+	+
Potassium nitrate	x	x		+	+	+	+	+
Potassium permanganate	x	x		o	o	o	+	+
Potassium phosphate	x	x		+	+	+	+	+
Potassium sulphate	x	x		+	+	+	+	+
Common salt	x	x		+	+	+	+	+
Cooking salt solution, saturated		x		+	+	+	+	+
Aqua regia		x		–	–	–	–	–
Copper chloride	x	x		+	+	+	+	+
Copper sulphate	x	x		+	+	+	+	+
Linseed oil			x	+	+	+	+	+
Magnesium chloride	x	x		+	+	+	+	+
Magnesium nitrate	x	x		+	+	+	+	+
Magnesium sulphate	x	x		+	+	+	+	+
Maleic acid	x		x	+	+	+	+	+
Manganese sulphate	x	x		+	+	+	+	+
Margarine	x		x	+	+	+	+	+
Machine oil			x	+	+	+	+	+
Methyl acetate			x	–	–	–	–	–
Methyl alcohol			x	–	–	–	+	–
Methylamine			x	–	–	–	–	–
Methylene chloride			x	–	–	–	–	–
Methyl ethyl ketone			x	–	–	–	–	–
Methyl isobutyl ketone			x	–	–	–	–	–
Milk			x	+	+	+	+	+
Lactic acid		x		+	+	+	+	+
Lactic acid conc.		x		o	o	o	o	+

Media	firm	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
Mineral oil			x	+	+	+	+	+
Sodium acetate	x	x		+	+	+	+	+
Sodium bromate	x	x		o	o	o	o	o
Sodium bromide	x	x		+	+	+	+	+
Sodium carbonate	x	x		+	+	+	+	+
Sodium chlorate	x	x		o	o	o	o	o
Sodium chloride	x	x		+	+	+	+	+
Sodium cyanide	x	x		+	+	+	+	+
Sodium fluoride	x	x		+	+	+	+	+
Sodium hypochlorite	x	x		+	+	+	+	+
Sodium nitrate	x	x		+	+	+	+	+
Sodium perborate	x	x		o	o	o	o	o
Sodium perchlorate	x	x		o	o	o	o	o
Sodium peroxide	x	x		–	–	–	–	–
Sodium phosphate	x	x		+	+	+	+	+
Sodium sulphate	x	x		+	+	+	+	+
Sodium sulphite	x	x		+	+	+	+	+
Caustic soda		x		–	–	–	+	+
Caustic soda 10-50%		x		–	–	–	o	+
Caustic soda conc.		x		–	–	–	–	+
Nickel chloride	x	x		+	+	+	+	+
Nickel sulphate	x	x		+	+	+	+	+
Oleum		x		–	–	–	–	–
Oxalic acid	x	x	x	o	o	o	o	+
Ozone				+	+	+	+	+
Paraffin oil			x	+	+	+	+	+
Perchloric acid < 10%		x		o	o	o	+	o
Perchloric acid < 70%		x		–	–	–	–	+
Persil 5%		x		+	+	+	+	+
Petroleum			x	o	o	o	o	+
Phenol	x		x	–	–	–	–	–
Phosphoric acid 10%		x		o	o	o	+	+
Phosphoric acid 50%		x		–	–	–	o	o
Phosphoric acid conc.		x		–	–	–	–	–
Phthalic acid	x			+	+	+	+	+
Propanol			x	o	o	o	+	o
Propionic acid		x		o	o	o	+	o
Propionic acid conc.		x		–	–	–	o	–
Mercury			x	+	+	+	+	+
Mercury chloride	x	x		+	+	+	+	+
Ricinus oil			x	o	o	o	o	+
Treacle			x	+	+	+	+	+
Salicylic acid	x	x		o	o	+	+	+
Nitric acid		x		–	–	–	–	o
Hydrochloric acid		x		–	–	–	o	+
Hydrochloric acid conc.		x		–	–	–	o	o
Grease	x			+	+	+	+	+
Lubricating oil			x	+	o	+	+	+
Sulphuric acid 10%		x		+	+	+	+	+
Sulphuric acid 20%		x		+	+	+	+	+
Sulphuric acid 40%		x		o	o	o	+	o
Sulphuric acid 60%		x		–	–	–	+	o

Media	firm	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
Sulphuric acid conc.		x		–	–	–	–	–
Silver nitrate	x	x		+	+	+	+	+
Edible oil			x	+	+	+	+	+
Stearic acid (fatty acid)	x	x		+	+	+	+	+
De-icing salt	x	x		+	+	+	+	+
De-icing salt, humid		x		+	+	+	+	+
Styrene			x	–	–	–	–	o
Tannic acid			x	+	+	+	+	+
Turpentine oil			x	o	o	o	o	o
Carbon tetrachloride			x	–	–	–	–	–
Tetrahydrofuran (THF)			x	–	–	–	–	–
Toluol			x	–	–	–	–	–
Trichlorethane			x	–	–	–	–	–
Trichlorethylene			x	–	–	–	–	–
Triethanolamine			x	–	–	–	–	–
Triethylamine		x		–	–	–	–	–
Trisodium phosphate	x	x		o	o	o	o	o
Urine			x	o	o	o	+	+
Water distilled			x	+	+	+	+	+
Water (sea, mineral, drinking water)			x	+	+	+	+	+
Water glass (Na-K)		x		o	o	o	o	+
Wine		x		+	+	+	+	+
Tartaric acid	x	x		+	+	+	+	+
Xylol			x	–	–	–	–	o
Zinc chloride	x	x		+	+	+	+	+
Zinc nitrate	x	x		+	+	+	+	+
Zinc sulphate	x	x		+	+	+	+	+
Stannous chloride	x	x		+	+	+	+	+
Citric acid	x	x		o	o	o	+	+
Sugar	x	x		+	+	+	+	+
Sugar humid		x		+	+	+	+	+

+ stable - no changes in the sample after storage for 60 days at 20 °C in the medium listed

o conditionally stable - no change of the sample after 3 days of storage at 20 °C in the medium mentioned (i.e. the waterproofing is only stable when exposed to small quantities and immediate removal)

– unstable - strong changes in the sample in the medium listed

Mixing of chemicals and also other environmental conditions must be subject to independent tests.

Calculation Recommendation

Tabular overview of **material and time requirements** for processing KEMPEROL products

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Product	Consumption	Time
KEMPERTEC primers		
KEMPERTEC R Primer	at least 0.5 kg / m²	approx. 5 min / m²
KEMCO 1K Primer	at least 0.3 kg / m²	approx. 3 min / m²
KEMPERTEC AC Primer / KEMPERTEC AC M-Primer	at least 0.5 kg / m²	approx. 5 min / m²
KEMPERTEC EP5 primer	at least 0.5 kg / m²	approx. 5 min / m²
KEMCO NQ 0408 Natural Quartz	at least 2.0 kg / m²	approx. 1 min / m²
KEMPERTEC Rapid SF Primer	at least 0.5 kg/m²	approx. 5 min / m²
KEMPERTEC FPO Primer	at least 0.05 kg / m²	approx. 3 min / m²
KEMCO POX 2K Primer	at least 0.25 kg/m²	approx. 5 min / m²
KEMPERTEC Glass Primer	at least 0.03 kg/m²	approx. 3 min/m²
KEMPERTEC TPO-Primer	at least 0.05 kg / m²	approx. 3 min/m²
Filling compound		
KEMPERTEC EP5 primer KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:2)	at least 2 kg / m² / mm	approx. 7 min / m²
KEMPERTEC AC Primer KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:3)	at least 2 kg / m² / mm	approx. 7 min / m²
Repair mortar		
KEMPERTEC EP5 primer KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:5)	at least 2 kg / m² / mm	approx. 7 min / m²
Alkaline protection		
KEMPERTEC EP5 primer with	at least 0.5 kg / m²	approx. 6 min / m²
KEMCO NQ 0712 Natural Quartz	at least 1.5 kg / m²	approx. 1 min / m²
KEMPERTEC AC Primer with	at least 0.5 kg / m²	approx. 6 min / m²
KEMCO NQ 0712 Natural Quartz	at least 1.0 kg / m²	approx. 1 min / m²
KEMPEROL sealings		
KEMPEROL 1K-PUR waterproofing with	at least 3.4 kg/m²	approx. 12 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL 1K-SF waterproofing with	at least 3.0 kg / m²	approx. 12 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL 2K-PUR waterproofing with	at least 3.0 kg / m²	approx. 15 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL AC Speed with	at least 2.5 kg / m²	approx. 15 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL AC Speed⁺ with	at least 2.5 kg / m²	approx. 15 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL PU Aqua with	at least 2.5 kg/m²	approx. 12 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL V 210 M waterproofing with	at least 2.8 kg/m²	approx. 15 min / m²
KEMPEROL 165 fleece	at least 1,05 m² / m²	
KEMPEROL fleece		
for overlapping application KEMPEROL fleece	at least 1,05 m² / m²	refer to waterproofing
for butt jointed application	at least 1,0 m² / m²	refer to waterproofing
KEMCO RS Reinforcement Strip	approx. 1 linear m / joint	

KEMPERDUR AC Park and KEMPERDUR AC Park+		
KEMPERDUR AC Park with	at least 1.2 kg / m²	approx. 15 min / m²
KEMPERDUR AC filler	at least 2.8 kg / m²	
KEMPERDUR AC Park+ with	at least 1.5 kg / m²	approx. 15 min / m²
KEMPERDUR AC Park+ special filler	at least 2.5 kg / m²	
KEMPERDUR AC-Finish	at least 0.75 kg / m²	approx. 3 min / m²
KEMPERDUR AC coating		
KEMPERDUR AC coating with	at least 1.2 kg / m²	approx. 12 min / m²
KEMPERDUR AC filler	at least 2.8 kg / m²	
KEMPERDUR AC-Finish* with	at least 0.75 kg / m²	approx. 3 min / m²
KEMPERDUR CS Microchips	at least 0.1 kg / m²	approx. 2 min / m²
KEMPERTEC AC GF Gradient filler and KEMPERTEC AC RM Repair Mortar		
KEMPERTEC AC GF Gradient filler	at least 2.1 kg / m²	approx. 18 min / m²
KEMPERTEC AC RM Repair Mortar	at least 1.4 kg / m²	approx. 18 min / m²
KEMPERDUR HB thick coating		
for horizontal surfaces		
KEMPERDUR HB thick coating and	at least 6 kg / m²	approx. 15 min / m²
KEMPERDUR CL Chips	at least 0.03 kg / m²	approx. 2 min / m²
for vertical surfaces		
KEMPERDUR Deko 2K*	at least 0.4 kg / m²	approx. 8 min / m²
KEMPERDUR Finish glossy		
KEMPERDUR Finish glossy	at least 0.2 kg / m²	approx. 5 min / m²
KEMPERDUR TC coating		
KEMPERDUR TC coating and	at least 4.0 kg / m²	approx. 8 min / m²
KEMCO NQ 0712 Natural Quartz	at least 5.0 kg / m²	approx. 5 min / m²
(incl. sweeping to remove excess natural quartz)		
KEMPERDUR TC coating and	at least 4.0 kg / m²	approx. 8 min / m²
KEMPERDUR CQ 0408 Colorquarz	at least 4.0 kg / m²	approx. 5 min / m²
(incl. sweeping to remove excess coloured quartz)		
KEMPERDUR TC coating and	at least 4.0 kg / m²	approx. 8 min / m²
KEMCO Coloured quartz	at least 4.0 kg / m²	approx. 5 min / m²
incl. sweeping off the surplus color quartz)		
KEMPERDUR Finish matt*		
KEMPERDUR Finish matt	at least 0.2 kg / m²	approx. 5 min / m²
Bonding coat		
KEMPERTEC EP5 primer with	at least 0.3 kg / m²	approx. 5 min / m²
KEMCO NQ 0408 Natural Quartz	at least 2.0 kg / m²	approx. 1 min / m²
KEMCO 1K Primer with	at least 0.3 kg / m²	approx. 3 min / m²
KEMCO NQ 0408 Natural Quartz	at least 2.0 kg / m²	approx. 1 min / m²
KEMCO Decor Stone / Natural Stones		
Bonding bridge		
KEMPERTEC EP5 primer with	at least 0.3 kg / m²	approx. 5 min / m²
KEMCO NQ 0408 Natural Quartz	at least 0.3 kg / m²	approx. 1 min / m²
KEMCO QB1 Binder KEMCO Decor Stone / Natural Stones Mixing ratio 1.75 kg package binding agents at 25 kg Decor Stones / Natural Stones)	at least 18 kg / m²	approx. 20 min / m²

KEMPERDUR Quartz covering		
KEMPERDUR Deko transparent	at least 0.3 kg / m²	approx. 4 min / m²
KEMPERDUR CQ 0408 Colorquarz or	at least 4.0 kg / m²	approx. 3 min / m²
KEMCO Coloured quartz		
KEMPERDUR Deko transparent as	at least 0.4 kg / m²	approx. 10 min / m²
a sealing coat (incl. sweeping to remove excess coloured quartz)		
KEMPERDUR Deko*		
KEMPERDUR Deko	at least 1.2 kg / m²	approx. 6 min / m²
KEMPERDUR CL Chips	at least 0.03 kg / m²	approx. 2 min / m²
KEMPERDUR Finish matt	at least 0.2 kg / m²	approx. 3 min / m²
KEMPERDUR Deko 2K*		
KEMPERDUR Deko 2K and	at least 1.2 kg / m²	approx. 8 min / m²
KEMPERDUR CL Chips	at least 0.03 kg / m²	approx. 2 min / m²
KEMPERDUR EP-Finish*		
KEMPERDUR EP-Finish color	at least 1.0 kg / m²	approx. 8 min / m²
KEMPEROL 022 waterproofing		
KEMPERTEC TG Primer	at least 0.15 kg / m²	approx. 3 min / m²
KEMPEROL 022 waterproofing	at least 1.6 kg/m²	approx. 15 min / m²
KEMPEROL 500 fleece	at least 1,05 m² / m²	
KEMPERDUR MT mineral tile adhesive	at least 1.6 kg / m²	approx. 10 min / m²
KEMPEROL FALLSTOP		
KEMPEROL FALLSTOP	at least. 0.4 kg / m² / operation (1.6 kg/m² total consumption **)	approx. 15 min / m² / step

This table serves as a guidance for the contractor and should only be seen as a recommendation. Please refer to the relevant technical data sheets for the combination of primers, waterproofings and surfacings. Not all product combinations are possible!

Depending on the details the consumption can increase by approx. 20%.

For details such as flat roof drains, flat roof vents, wall connections, skylight dome etc. a time increase of approx. 100% used for calculation. For smaller surfaces (< 50 m²) approx. 2 min should be added to the mixing time!

When calculating the consumption of fleece, consider 5 cm overlap.

(*) For these products, information regarding time and consumption refer to one application / work step.

(**) Total consumption 1.6 kg/m² The material must be applied evenly in four working steps of at least 400 g/ m². (corresponds to 400 µm on the measuring comb)