SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
- Trade name: KEMPERDUR ASG Granulat rh.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture: No further relevant information available.
- Additional component: Coating
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: KEMPER SYSTEM GmbH & Co. KG
  Holländische Strasse 32-36
  34246 Vellmar
  Deutschland / Germany
  Telefon: +49 (0)561 / 8295-0
  Telefax: +49 (0)561 / 8295-5110
  E-Mail: MSDS@KEMPER-SYSTEM.COM
- Further information obtainable from: Research and Development
- 1.4 Emergency telephone number: Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
  Langenbeckstraße 1; Gebäude 601; 55131 Mainz
  Tel. Nr.: +49 (0)6131 / 19 24 0
  Universitätsmedizin der Johannes Gutenberg-Universität Mainz

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  The product is not classified according to the CLP regulation.
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
  Not applicable.
- Classification according to Directive 1907/2006/EC, Article 31

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
  Void
- Hazard pictograms
  Void
- Signal word
  Void
- Hazard statements
  Void
- 2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.1 Chemical characterisation: Substances
  CAS No. Description
  9002-86-2 polyvinyl chloride
- 3.2 Chemical characterisation: Mixtures
  Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:
  9002-86-2 polyvinyl chloride
  Substance with a Community workplace exposure limit | 2.5-10% concentration.
- Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: No special measures required.
- After inhalation:
  Supply fresh air and to be sure call for a doctor.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
  Rinse opened eye for several minutes under running water.
  If symptoms persist consult doctor.
- After eye contact:
- After swallowing:
  No further relevant information available.
- 4.2 Most important symptoms and effects, both acute and delayed
- 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:
  CO2, sand, extinguishing powder. Do not use water.
  Alcohol resistant foam

(Contd. on page 2)
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: KEMPERDUR ASG Granulat rh.

(Contd. of page 1)

- 5.2 Special hazards arising from the substance or mixture
  ABC powder
- 5.3 Advice for firefighters
  No further relevant information available.
- Protective equipment:
  Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Ensure adequate ventilation
  Keep away from ignition sources.
- 6.2 Environmental precautions:
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/surface or ground water.
  Prevent from spreading (e.g. by damming-in or oil barriers).
- 6.3 Methods and material for containment and cleaning up:
  Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents
- 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  No special measures required.
  Store in cool, dry place in tightly closed receptacles.
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
  Use only in well ventilated areas.
- Information about fire - and explosion protection:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles:
      Provide solvent resistant, sealed floor.
    - Information about storage in one common storage facility:
      Store away from foodstuffs.
    - Further information about storage conditions:
      Protect from frost.
      Keep container tightly sealed.
- 7.3 Specific end use(s)
  No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities:
  No further data; see item 7.
- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:
  9002-86-2 polyvinyl chloride
  WEL Long-term value: 10** *mg/m³
  *inhalable dust **respirable dust
- Additional information:
  The lists valid during the making were used as basis.
- 8.2 Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing
    Wash hands before breaks and at the end of work.
    Avoid contact with the eyes and skin.
  - Respiratory protection:
    In case of brief exposure or low pollution use respiratory filter device.
    In case of intensive or longer exposure use self-contained respiratory protective device.
    Use suitable respiratory protective device in case of insufficient ventilation.
- Protection of hands:
  Protective gloves
  Only use chemical-protective gloves with CE-labelling of category III.

(Contd. on page 3)
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - Recommended thickness of the material: ≥ 0.7 mm
  - Synthetic rubber gloves

- **Penetration time of glove material**
  - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
  - Value for the permeation: Level ≤ 3

- **Eye protection:**
  - Tightly sealed goggles

- **Body protection:**
  - Protective work clothing
  - Impervious protective clothing

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**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:** Powder
  - **Colour:** White
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.
  - **pH-value:** Not applicable.

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** Undetermined.

- **Flash point:** > 93 °C

- **Flammability (solid, gaseous):** Not determined.

- **Ignition temperature:**
  - **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.

- **Density at 20 °C:** 0.9 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with water:** Insoluble.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  - **Dynamic:** Not applicable.
  - **Kinematic:** Not applicable.

- **9.2 Other information**
  - No further relevant information available.
SECTION 10: Stability and reactivity

- 10.1 Reactivity
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.2 Chemical stability
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity
- Primary irritant effect: No irritant effect.
- Skin corrosion/irritation: No irritating effect.
- Serious eye damage/irritation: No sensitising effects known.
- Respiratory or skin sensitisation: No sensitising effects known.
- Additional toxicological information: The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability: No further relevant information available.
- 12.3 Bioaccumulative potential: No further relevant information available.
- 12.4 Mobility in soil: No further relevant information available.
- Additional ecological information: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation: Smaller quantities can be disposed of with household waste.
- European waste catalogue
  12 01 05 plastics shavings and turnings
- Uncleaned packaging: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number
- ADR, ADN, IMDG, IATA: Void
- 14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA: Void
- 14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA: Void
- Class
- 14.4 Packing group
- ADR, IMDG, IATA: Void
- 14.5 Environmental hazards:
- Marine pollutant: No
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: KEMPERDUR ASG Granulat rh.

- 14.6 Special precautions for user
  Not applicable.

- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  Not applicable.

- UN "Model Regulation": -

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  Directive 2012/18/EU
  Named dangerous substances - ANNEX I
  None of the ingredients is listed.

- 15.2 Chemical safety assessment:
  A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS:
  research & development

- Contact:
  research & development

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  VOC: Volatile Organic Compounds (USA, EU)

* Data compared to the previous version altered.