1 Identification

- Product identifier
- Trade name: DOSSOLITE 1500-74
- Article number: PMP01083B
- Application of the substance / the mixture
  Basic dry mix, for the working lining of steel continuous casting tundish
- Details of the supplier of the safety data sheet
  Manufacturer/Supplier: DAUSSAN
  29-33 route de Rombas, BP 60720
  F-57147 WOIPPY CEDEX
  FRANCE
  FDS@daussan.com
- Information department: Département sécurité du produit
- Emergency telephone number: Pendant les heures normales d'ouverture: +33/3/873 25 280

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified, according to the Globally Harmonized System (GHS).

- Label elements
  - Hazard pictograms: Void
  - Signal word: Void
  - Hazard statements: Void
  - Classification system:
    - NFPA ratings (scale 0 - 4)
      Health = 0
      Fire = 0
      Reactivity = 0
    - HMIS-ratings (scale 0 - 4)
      HEALTH: Health = 0
      FIRE: Fire = 0
      REACTIVITY: Reactivity = 0

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:
  - 1309-48-4 magnesium oxide 50-100%
  - 9004-34-6 Cellulose 2.5%

4 First-aid measures

- Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.

(Contd. on page 2)
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Protective equipment: see section 8
- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.
- 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.
- Protective Action Criteria for Chemicals

  **PAC-1:**
  - 1309-48-4 magnesium oxide 30 mg/m³
  - 1344-09-8 Silicic acid, sodium salt 5.9 mg/m³
  - 471-34-1 calcium carbonate 45 mg/m³
  - 14808-60-7 Quartz (SiO₂) (respirable) 0.075 mg/m³
  - 1310-73-2 sodium hydroxide 0.5 mg/m³

  **PAC-2:**
  - 1309-48-4 magnesium oxide 120 mg/m³
  - 1344-09-8 Silicic acid, sodium salt 65 mg/m³
  - 471-34-1 calcium carbonate 210 mg/m³
  - 14808-60-7 Quartz (SiO₂) (respirable) 33 mg/m³
  - 1310-73-2 sodium hydroxide 5 mg/m³

  **PAC-3:**
  - 1309-48-4 magnesium oxide 730 mg/m³
  - 1344-09-8 Silicic acid, sodium salt 390 mg/m³
  - 471-34-1 calcium carbonate 1,300 mg/m³
  - 14808-60-7 Quartz (SiO₂) (respirable) 200 mg/m³
  - 1310-73-2 sodium hydroxide 50 mg/m³

7 Handling and storage

- Handling:
  - Precautions for safe handling: No special measures required.
  - Information about protection against explosions and fires: No special measures required.
8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters

- Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL (Long-term)</th>
<th>REL (Long-term)</th>
<th>TLV (Long-term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1309-48-4 magnesiu oxide</td>
<td>15* mg/m³</td>
<td>10* mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as total particulate</td>
<td>**as respirable fraction</td>
<td></td>
</tr>
<tr>
<td>9004-34-6 Cellulose</td>
<td>15* mg/m³</td>
<td>10* mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as total dust **as respirable fraction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls

- Personal protective equipment:

  - General protective and hygienic measures:
    The usual precautionary measures for handling chemicals should be followed.
  - Breathing equipment: Suitable respiratory protective device recommended.
  - Protection of hands:
    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. 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.
  - 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.
  - Eye protection: Safety glasses
  - Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

  Form: Powder
### 48.0

- **Color:** Beige
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Vapor pressure:** Not applicable.
  - **Density at 20 °C (68 °F):** 1.1 g/cm³ (9.18 lbs/gal) (Bulk density)
  - **Relative density** Not determined.
  - **Vapor 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.
  - **Solvent content:**
    - VOC content: 0.00 %
  - **Solids content:** 100.0 %
  - **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products** No dangerous decomposition products known.
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      1310-73-2 sodium hydroxide
      Oral LD50 2,000 mg/kg (rat)
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product is not subject to classification according to internally approved calculation methods for preparations:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
  - Carcinogenic categories
    - IARC (International Agency for Research on Cancer)
      14808-60-7 Quartz (SiO2) (respirable) I
    - NTP (National Toxicology Program)
      14808-60-7 Quartz (SiO2) (respirable) K
    - OSHA-Ca (Occupational Safety & Health Administration)
      None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (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.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation: Les déchets peuvent être transportés sur une décharge agréée.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
14 Transport information

- UN-Number: Void
- DOT, ADN, IMDG, IATA: Void
- UN proper shipping name: Void
- DOT, ADN, IMDG, IATA: Void
- Transport hazard class(es): Void
- DOT, ADN, IMDG, IATA: Void
- Packing group: Void
- DOT, IMDG, IATA: Void
- Environmental hazards: Not applicable.
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
- UN "Model Regulation": Void

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

  - Section 355 (extremely hazardous substances): None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    - 1309-48-4 magnesium oxide
    - 9004-34-6 Cellulose
    - 1344-09-8 Silicic acid, sodium salt
    - 1332-58-7 Kaolin
    - 471-34-1 calcium carbonate
    - 8061-51-6 Lignosulfonic acid sodium salt
    - 14808-60-7 Quartz (SiO2) (respirable)
    - 1310-73-2 sodium hydroxide

  - Proposition 65
    - Chemicals known to cause cancer:
      - 14808-60-7 Quartz (SiO2) (respirable)
    - Chemicals known to cause reproductive toxicity for females:
      - None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      - None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      - None of the ingredients is listed.

  - Carcinogenic categories
    - EPA (Environmental Protection Agency)
      - None of the ingredients is listed.
Trade name: DOSSOLITE 1500-74

48.0 TLV (Threshold Limit Value established by ACGIH)
- 1309-48-4 magnesium oxide A4
- 1332-58-7 Kaolin A4
- 14808-60-7 Quartz (SiO2) (respirable) A2

NIOSH-Ca (National Institute for Occupational Safety and Health)
- 14808-60-7 Quartz (SiO2) (respirable)

GHS label elements: Void
- Hazard pictograms: Void
- Signal word: Void
- Hazard statements: Void

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

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 SDS: Service protection de l’environnement
- Contact: M. Scheibert
- Date of preparation / last revision 01/04/2019 / 3
- Abbreviations and acronyms:
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - 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)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit