1 Identification

- Product identifier
  - Trade name: HD 25 VO
  - Article number: 83-67458
- Application of the substance / the mixture
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Dayton® Superior
    4226 Kansas Avenue                   Tel.: (866) 329-8724
    Kansas City, KS 66106

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call international number, +1 703 741-5970. Collect calls are accepted.

- Information department: Environmental, Health, and Safety department.

2 Hazard(s) identification

- Classification of the substance or mixture
  Skin Irrit. 2  H315  Causes skin irritation.
  Eye Irrit. 2A H319  Causes serious eye irritation.
  Skin Sens. 1 H317  May cause an allergic skin reaction.
  Carc. 1A  H350  May cause cancer.

- Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms

![GHS07](image1)
![GHS08](image2)

- Signal word Danger

- Hazard-determining components of labeling:
  Quartz (SiO2)
  Cement, portland, chemicals

- Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
  May cause an allergic skin reaction.
  May cause cancer.

- Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wear protective gloves.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Specific treatment (see on this label).
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Safety Data Sheet
acc. to OSHA HCS

Trade name: HD 25 VO

- Classification system:
  - NFPA ratings (scale 0 - 4)
    Health = 1
    Fire = 0
    Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    HEALTH = 1
    FIRE = 0
    PHYSICAL HAZARD = 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:
  
<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>25-50%</td>
</tr>
<tr>
<td>1317-65-3</td>
<td>Limestone</td>
<td>10-25%</td>
</tr>
<tr>
<td>26499-65-0</td>
<td>Calcium sulfate</td>
<td>≤ 10%</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin</td>
<td>≤ 5%</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>Cement, portland, chemicals</td>
<td>≤ 2.5%</td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- Description of first aid measures
- General information:
  Immediately remove any clothing soiled by the product.
  In the event of persistent symptoms receive medical treatment.
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- 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.
  Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.

- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation continues, consult a doctor.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.


- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.

(Contd. on page 3)
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
  - Protective equipment:
    Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - No special measures required.
- Methods and material for containment and cleaning up:
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- 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.

7 Handling and storage

- Handling:
  - Precautions for safe handling:
    Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.
  - Information about protection against explosions and fires:
    Keep respiratory protective device available.
  - Conditions for safe storage, including any incompatibilities:
    - Storage: cool and dry
    - Requirements to be met by storerooms and receptacles:
      No special requirements.
    - Information about storage in one common storage facility:
      Store away from foodstuffs.
    - Further information about storage conditions:
      Keep receptacle tightly sealed.
- Specific end use(s):
  - No further relevant information available.

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:
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

### 14808-60-7 Quartz (SiO2)

- **PEL**: see Quartz listing
- **REL**: Long-term value: 0.05* mg/m³
  - *respirable dust; See Pocket Guide App. A*
- **TLV**: Long-term value: 0.025* mg/m³
  - *as respirable fraction*

### 26499-65-0 Calcium sulfate

- **PEL**: Long-term value: 15* 5** mg/m³
  - *total dust **respirable fraction
- **REL**: Long-term value: 10* 5** mg/m³
  - *total dust **respirable fraction

### 1332-58-7 Kaolin

- **PEL**: Long-term value: 15* 5** mg/m³
  - *total dust **respirable fraction
- **REL**: Long-term value: 10* 5** mg/m³
  - *total dust **respirable fraction
- **TLV**: Long-term value: 2* mg/m³
  - E; *as respirable fraction

### 65997-15-1 Cement, portland, chemicals

- **PEL**: Long-term value: 50 mppcf or 15* 5** mg/m³
  - *total dust **respirable fraction
- **REL**: Long-term value: 10* 5** mg/m³
  - *total dust **respirable fraction
- **TLV**: Long-term value: 1* mg/m³
  - E; *as respirable fraction

---

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

- **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.
    - Store protective clothing separately.
    - Avoid contact with the eyes and skin.
  - **Breathing equipment:** Suitable respiratory protective device recommended.
  - **Protection of hands:**
    - **Protective gloves**

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Solid</td>
</tr>
</tbody>
</table>
| Color                                          | According to product specif.
| Odor                                          | Characteristic              |
| Odor threshold                                | Not determined.             |
| **pH-value**                                  | Not applicable              |
| **Change in condition**                       |                             |
| Melting point/Melting range                   | Undetermined.               |
| Boiling point/Boiling range                   | >999 °C (>1830 °F)          |
| **Flash point**                               | Not applicable.             |
| **Flammability (solid, gaseous)**             | Not determined.             |
| **Ignition temperature:**                     |                             |
| Decomposition temperature                     | Not determined.             |
| Auto igniting                                 | Product is not selfigniting.|
| **Explosion limits**                          |                             |
| Lower                                         | Not determined.             |
| Upper                                         | Not determined.             |
| **Vapor pressure**                            | Not applicable.             |
| **Density at 20 °C (68 °F):**                 | 2.77142 g/cm³ (23.127 lbs/gal)|
| Relative density                              | Not determined.             |
| Vapor density                                 | Not applicable.             |
| Evaporation rate                              | Not applicable.             |
| **Solubility in / Miscibility with Water**    | Soluble.                    |
| **Partition coefficient (n-octanol/water):**  | Not determined.             |
| **Viscosity**                                 |                             |
| Dynamic                                       | Not applicable.             |
| Kinematic                                     | Not applicable.             |
| **Solvent content**                           |                             |
| Organic solvents                              | 0.0 %                       |
| **Solids content**                            | 100.0 %                     |
| **Other information**                         | No further relevant information available. |
| **Volatile Organic Compounds**                | Not determined              |
10 Stability and reactivity

- Reactivity: No decomposition if stored and applied as directed.
- Chemical stability: No decomposition if stored and applied as directed.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: Keep away from heat and sources of ignition.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
  - Primary irritant effect:
    - on the skin: May cause skin irritation.
    - on the eye: Strong irritant with the danger of severe eye injury. Irritating effect.
  - Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
  - Harmful
  - Irritant
- Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13983-17-0 Wollastonite</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>2B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1309-37-1 diiron trioxide</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
  - Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
13 Disposal considerations

- Waste treatment methods
  
  Recommendation:
  Must not be disposed of as normal garbage. Do not allow product to reach sewage system. It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.

- Uncleaned packagings:
  
  Recommendation: Disposal must be made according to Federal, State, and Local regulations.

  Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number
  DOT, ADR, ADN, IMDG, IATA
  Not Regulated

- UN proper shipping name
  DOT, ADR, ADN, IMDG, IATA
  Not Regulated

- Transport hazard class(es)
  DOT, ADR, ADN, IMDG, IATA
  Class
  Not Regulated

- Packing group
  DOT, ADR, IMDG, IATA
  III

- Environmental hazards:
  Marine pollutant:
  No

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

- Transport/Additional information:
  ADR
  U.S. Domestic Ground Shipments:
  Same as listed for Standard Shipments above.

  U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:
  Same as listed for Standard Shipments above.

  Emergency Response Guide (ERG) Number:
  Not determined

  UN "Model Regulation":
  Not Regulated

15 Regulatory information

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

- Sara

- Section 355 (extremely hazardous substances):
  None of the ingredient is listed.
### Section 313 (Specific toxic chemical listings):

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

<table>
<thead>
<tr>
<th>MSDS No.</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
<td>≤1%</td>
</tr>
<tr>
<td>554-13-2</td>
<td>lithium carbonate</td>
<td>≤1%</td>
</tr>
</tbody>
</table>

### TSCA (Toxic Substances Control Act):

<table>
<thead>
<tr>
<th>MSDS No.</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
</tr>
<tr>
<td>65997-16-2</td>
<td>Cement, alumina, chemicals</td>
</tr>
<tr>
<td>1317-65-3</td>
<td>Limestone</td>
</tr>
<tr>
<td>13983-17-0</td>
<td>Wollastonite</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>Cement, portland, chemicals</td>
</tr>
<tr>
<td>99999-99-9</td>
<td>Non-hazardous material</td>
</tr>
<tr>
<td>7631-86-9</td>
<td>silicon dioxide, chemically prepared</td>
</tr>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
</tr>
<tr>
<td>554-13-2</td>
<td>lithium carbonate</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
</tr>
<tr>
<td>7778-18-9</td>
<td>calcium sulphate, natural</td>
</tr>
<tr>
<td>1332-37-2</td>
<td>iron oxide</td>
</tr>
<tr>
<td>12136-45-7</td>
<td>dipotassium oxide</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>diiron trioxide</td>
</tr>
</tbody>
</table>

### Proposition 65

- **Chemicals known to the State of California (Prop. 65) to cause cancer:**
  - 14808-60-7 Quartz (SiO2)
  - 13463-67-7 titanium dioxide

- **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:**
  - 554-13-2 lithium carbonate

### Cancerogenity categories

### EPA (Environmental Protection Agency)

None of the ingredients is listed.

### TLV (Threshold Limit Value established by ACGIH)

<table>
<thead>
<tr>
<th>MSDS No.</th>
<th>Chemical Name</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>A2</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin</td>
<td>A4</td>
</tr>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
<td>A4</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
<td>A4</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>diiron trioxide</td>
<td>A4</td>
</tr>
<tr>
<td>1309-48-4</td>
<td>magnesium oxide</td>
<td>A4</td>
</tr>
</tbody>
</table>

### MAK (German Maximum Workplace Concentration)

<table>
<thead>
<tr>
<th>MSDS No.</th>
<th>Chemical Name</th>
<th>MAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>J</td>
</tr>
</tbody>
</table>
Trade name: HD 25 VO

1344-28-1 aluminium oxide
13463-67-7 titanium dioxide

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  14808-60-7 Quartz (SiO2)
  13463-67-7 titanium dioxide

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms


<table>
<thead>
<tr>
<th>GHS07</th>
<th>GHS08</th>
</tr>
</thead>
</table>

- Signal word Danger
- Hazard-determining components of labeling:
  Quartz (SiO2)
  Cement, portland, chemicals
- Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
  May cause an allergic skin reaction.
  May cause cancer.
- Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wear protective gloves.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Specific treatment (see on this label).
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- National regulations:
  - Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
  - Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The provided 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. 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: Environmental, Health & Safety Department
- Contact: Environmental, Health & Safety Manager
- Date of preparation / last revision 12/05/2016 / 26
- 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
  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)
Trade name: HD 25 VO

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
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
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 1A: Carcinogenicity, Hazard Category 1A