1 Identification

- Product identifier
- Trade name: Turbo Grout HP12
- Article number: 83-309021
- Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- Application of the substance / the mixture
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Dayton® Superior
  - 4226 Kansas Avenue
  - Kansas City, KS 66106
  - Tel.: (866) 329-8724

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
  - Carc. 1A H350 May cause cancer.
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
  - May cause eye and skin irritation. Prolonged contact may cause sensitization.
- Information concerning particular hazards for human and environment:
  - The product has to be labelled due to internationally acknowledged calculation procedures using the latest valid versions.
- Classification system:
  - The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- Label elements
  - GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms

GHS08

- Signal word: Danger
- Hazard-determining components of labeling:
  - Quartz (SiO2)
- Hazard statements
  - May cause cancer.
- Precautionary statements
  - If medical advice is needed, have product container or label at hand.
  - Keep out of reach of children.
  - Read label before use.
  - Use personal protective equipment as required.
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - IF exposed or concerned: Get medical advice/attention.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Turbo Grout HP12

- Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 1
    - Fire = 0
    - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH
    - Health = 1
  - FIRE
    - Fire = 0
  - PHYSICAL HAZARD
    - 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:
  - 14808-60-7 Quartz (SiO2) 25-50%
  - 65997-15-1 Cement, portland, chemicals 25-50%
  - 13397-24-5 Gypsum (Calcium sulfate) ≤ 2.5%

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

4 First-aid measures

- Description of first aid measures
  - 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:
    - If skin irritation continues, consult a doctor.
  - After eye contact:
    - Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing:
    - Seek medical treatment.
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed No further relevant information available.

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.
Trade name: Turbo Grout HP12

- 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: No special measures required.
- Methods and material for containment and cleaning up: 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

- 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: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
  Requirements to be met by storerooms and receptacles: No special requirements.
  Information about storage in one common storage facility: Not required.
  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:

<table>
<thead>
<tr>
<th>PEL</th>
<th>see Quartz listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Long-term value: 0.05* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*respirable dust; See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 0.025* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PEL</th>
<th>14808-60-7 Quartz (SiO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Long-term value: 0.05* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*respirable dust; See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 0.025* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PEL</th>
<th>65997-15-1 Cement, portland, chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Long-term value: 50 mppcf or 15* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 1* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Solid
  - Color: According to product specification
- Odor:
  - Odour 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.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapor pressure: Not applicable.
Trade name: Turbo Grout HP12

- **Density:** Not determined.
- **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.

- **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**
- **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:**
    - **Primary irritant effect:**
      - **on the skin:** May cause skin irritation.
      - **on the eye:** 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: Irritant

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - 14808-60-7 Quartz (SiO2) 1
    - 13463-67-7 titanium dioxide 2B
    - 1309-37-1 diiron trioxide 3
  - **NTP (National Toxicology Program)**
    - 14808-60-7 Quartz (SiO2) K

(Contd. on page 6)
Trade name: Turbo Grout HP12

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - 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.
- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    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.

14 Transport information

- UN-Number
  - DOT, ADR, IMDG, IATA: Not Regulated
- UN proper shipping name
  - ADR: Not Regulated
- Transport hazard class(es)
  - DOT, ADR, IMDG, IATA
    - Class: N/A
- Packing group
  - DOT, ADR, IMDG, IATA
    - Class: III
- Environmental hazards:
  - Marine pollutant: No
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.

(Contd. on page 7)
### 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>CAS Number</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>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td></td>
</tr>
<tr>
<td>65997-15-1</td>
<td>Cement, portland, chemicals</td>
<td></td>
</tr>
<tr>
<td>65997-16-2</td>
<td>Cement, alumina, chemicals</td>
<td></td>
</tr>
<tr>
<td>7440-44-0</td>
<td>carbon</td>
<td></td>
</tr>
<tr>
<td>9084-06-4</td>
<td>Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt</td>
<td></td>
</tr>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
<td></td>
</tr>
<tr>
<td>471-34-1</td>
<td>calcium carbonate</td>
<td></td>
</tr>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
<td></td>
</tr>
<tr>
<td>1309-37-1</td>
<td>diuron trioxide</td>
<td></td>
</tr>
<tr>
<td>99999-99-9</td>
<td>Non-hazardous material</td>
<td></td>
</tr>
<tr>
<td>7778-18-9</td>
<td>calcium sulphate, natural</td>
<td></td>
</tr>
<tr>
<td>7704-34-9</td>
<td>sulfur</td>
<td></td>
</tr>
</tbody>
</table>

- **TSCA (Toxic Substances Control Act):**
  - 14808-60-7 Quartz (SiO2)
  - 65997-15-1 Cement, portland, chemicals
  - 65997-16-2 Cement, alumina, chemicals
  - 7440-44-0 carbon
  - 9084-06-4 Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt
  - 1344-28-1 aluminium oxide
  - 471-34-1 calcium carbonate
  - 13463-67-7 titanium dioxide
  - 1309-37-1 diuron trioxide
  - 99999-99-9 Non-hazardous material
  - 7778-18-9 calcium sulphate, natural
  - 7704-34-9 sulfur

- **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:**
    
    None of the ingredients is listed.
### Cancerogenity categories
None of the ingredients is listed.

### TLV (Threshold Limit Value established by ACGIH)
- 14808-60-7 Quartz (SiO2) A2
- 1344-28-1 aluminium oxide A4
- 13463-67-7 titanium dioxide A4
- 1309-37-1 diiron trioxide A4

### MAK (German Maximum Workplace Concentration)
- 14808-60-7 Quartz (SiO2) 1
- 1344-28-1 aluminium oxide 2
- 13463-67-7 titanium dioxide 3A

### 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
- GHS08

#### Signal word
Danger

#### Hazard-determining components of labeling:
- Quartz (SiO2)

#### Hazard statements
May cause cancer.

#### Precautionary statements
- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- Use personal protective equipment as required.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- IF exposed or concerned: Get medical advice/attention.
- 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.

### 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:
Environmental, Health & Safety Department
Safety Data Sheet
acc. to OSHA HCS

Printing date 01/17/2015
Reviewed on 01/17/2015

Trade name: Turbo Grout HP12

- Contact: Environmental, Health & Safety Manager
- Date of preparation / last revision 01/17/2015 / 24
- 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)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  Carc. IA: Carcinogenicity, Hazard Category IA