1. Product and company identification

Product identifier

Trade name: Vitrified Bonded Abrasives
This safety data sheet pertains to the following products:
Mounted Points, vitrified bond
Floor and Hand Rubs, vitrified bond
Bench grinding wheels, vitrified bond
Dressing stones, vitrified bond

Relevant identified uses of the substance or mixture and uses advised against

General use: Grinding and sanding of different kinds of materials.
For industrial purposes only

Details of the supplier of the safety data sheet

Company name:
PFERD INC.
Street/POB-No.: 9201 W. Heather Ave.
Postal Code, city: Milwaukee, WI 53224,
USA
WWW: www.pferdusa.com
E-mail: sales@pferdusa.com
Telephone: 262-509-5614
Telefax: 262-255-2840
Dept. responsible for information: 1-800-342-9015

PFERD CANADA INC.
Street/POB-No.: 5570 McAdam Road
Postal Code, city: Mississauga, Ontario L4Z 1P1,
Canada
WWW: www.pferdusa.com
E-mail: sales@pferdcanada.ca
Telephone: (905) 501-1555
Telefax: (905) 501-1554
Dept. responsible for information: 1-866-245-1555

Emergency phone number
USA/Canada: 1-800-255-3924

2. Hazards identification

Emergency overview

Appearance:
Form: solid
Color: varying colors

Odor: No data available

Classification: Article not subject to hazard labeling or classification.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

Mechanical processing produce particles and dust from the workpiece and abrasive.
Inhalation of dust may cause irritation of the respiratory system.
Fibers/dusts: May cause cancer.
see section 11: Toxicological information
3. Composition / Information on ingredients

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Designation</th>
<th>Content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 1344-28-1</td>
<td>Aluminium oxide</td>
<td>&lt; 98 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 409-21-2</td>
<td>Silicon carbide</td>
<td>&lt; 98 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 60676-86-0</td>
<td>amorphous silica</td>
<td>&lt; 50 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>&lt; 5 %</td>
<td>Carcinogenicity 1A.</td>
</tr>
<tr>
<td>CAS 13463-67-7</td>
<td>Titanium dioxide</td>
<td>&lt; 5 %</td>
<td>Carcinogenicity 2.</td>
</tr>
<tr>
<td>CAS 1309-37-1</td>
<td>Diiron trioxide</td>
<td>&lt; 5 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS -</td>
<td>Micro wax</td>
<td>&lt; 3 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS -</td>
<td>Paraffin wax</td>
<td>&lt; 3 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 1308-38-9</td>
<td>Chromium (III) oxide</td>
<td>&lt; 2 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 1312-81-8</td>
<td>Lanthanum oxide</td>
<td>&lt; 1 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 7631-86-9</td>
<td>Silicon dioxide</td>
<td>&lt; 1 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 1309-48-4</td>
<td>Magnesium oxide</td>
<td>&lt; 0.5 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 1314-36-9</td>
<td>Yttrium oxide</td>
<td>&lt; 0.5 %</td>
<td>not applicable</td>
</tr>
<tr>
<td>CAS 1305-78-8</td>
<td>Calcium oxide</td>
<td>&lt; 0.5 %</td>
<td>Skin Irritation 2.  Eye Damage 1. Specific Target Organ Toxicity (Single Exposure) 3.</td>
</tr>
</tbody>
</table>

Additional information: The ingredients are embedded in the product.

4. First aid measures

In case of inhalation: Fibers/dusts: Provide fresh air. If you feel unwell, seek medical advice.

Following skin contact: Fibers/dusts: Remove residues with soap and water. In case of skin reactions, consult a physician.

After eye contact: Fibers/dusts: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if any. In case of eye irritation consult an ophthalmologist.

After swallowing: Fibers/dusts: Rinse mouth with water. Give water to drink in small sips. If you feel unwell, seek medical advice.

Most important symptoms and effects, both acute and delayed

Inhalation of dust may cause irritation of the respiratory system.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range: No data available

Auto-ignition temperature: No data available
Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Specific hazards arising from the chemical

On heating or in case of fire toxic gases may form.

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Do not allow fire water to penetrate into surface or ground water.

---

6. Accidental release measures

Personal precautions:

For mechanical processing: Avoid generation of dust. Do not inhale substance.
In case of heating: Development of gas/vapor possible.
Provide adequate ventilation. Wear appropriate protective equipment.
Avoid contact with the substance. Keep unprotected people away.

Environmental precautions:

Do not allow to penetrate into soil, waterbodies or drains.
In case of release, notify competent authorities.

Methods for clean-up:

Take up mechanically, placing in appropriate containers for disposal.

---

7. Handling and storage

Handling

Advises on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid generation of dust. In case of heating: Development of gas/vapor possible. Do not inhale substance. Wear appropriate protective equipment. Avoid contact with the substance.

Storage

Requirements for storerooms and containers:

Keep container tightly closed and dry.
Keep in a cool, well-ventilated place.

Hints on joint storage:

Do not store together with oxidizing agents or acids.
Do not store together with food.
### 8. Exposure controls / personal protection

#### Exposure guidelines

Occupational exposure limit values:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Designation</th>
<th>Type</th>
<th>Limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-28-1</td>
<td>Aluminium oxide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>10 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>409-21-2</td>
<td>Silicon carbide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.1 fibers/cm³ (fibrous, including whiskers; inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>10 mg/m³ (non-fibrous; inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>3 mg/m³ (non-fibrous; respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>0.1 fibers/cm³ (fibrous, including whiskers)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>10 mg/m³ (non-fibrous; inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>3 mg/m³ (non-fibrous; respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>0.1 fibers/cm³ (fibrous, including whiskers; inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>10 mg/m³ (non-fibrous; inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>3 mg/m³ (non-fibrous; respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³ (non-fibrous; inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.1 fibers/cm³ (fibrous, including whiskers)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>10 mg/m³ (inhalable fraction; particulate matter containing no asbestos and &lt; 1% crystalline silica)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>3 mg/m³ (respirable fraction; particulate matter containing no asbestos and &lt; 1% crystalline silica)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>10 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>60676-86-0</td>
<td>amorphous silica</td>
<td>Canada, Ontario: OEL TWA</td>
<td>0.1 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.1 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td>CAS No.</td>
<td>Designation</td>
<td>Type</td>
<td>Limit value</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------</td>
<td>----------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>0.1 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.1 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.025 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>0.05 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>10 mg/m³/% SiO2+ 2 (respirable Dust)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>250 mppcf/%SiO2+5 fine dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>30 mg/m³/% SiO2+ 2 inhalable fraction</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>3 mg/m³ respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>Diiron trioxide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL STEL</td>
<td>10 mg/m³ Smoke; calculated as Fe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>10 mg/m³ (oxide, red)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>3 mg/m³ (oxide, red)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL STEL</td>
<td>5 mg/m³ oxide dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>5 mg/m³ Smoke; calculated as Fe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³ (red)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>10 mg/m³ (Iron oxide, fume; calculated as Fe)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³ (inhalable fraction, red)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>5 mg/m³ (red, respirable fraction)</td>
</tr>
<tr>
<td>1308-38-9</td>
<td>Chromium (III) oxide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td>7631-86-9</td>
<td>Silicon dioxide</td>
<td>USA: NIOSH: TWA</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>20 mppcf</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>80 mg/m³ total dust</td>
</tr>
</tbody>
</table>
Engineering controls

In the case of the formation of dust: Provide good ventilation and/or an exhaust system in the work area.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection
For mechanical processing: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection
For mechanical processing: Wear suitable protective clothing and shoes.

Respiratory protection:
In case of dust formation:
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General hygiene considerations:
For mechanical processing: Do not inhale substance.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke. Change contaminated clothing.
Wash hands before breaks and after work.
Work place should be equipped with a shower and an eye rinsing apparatus.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:
Form: solid
Color: varying colors

Odor:
No data available
Odor threshold:
No data available

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Designation</th>
<th>Type</th>
<th>Limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1309-48-4</td>
<td>Magnesium oxide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL STEL</td>
<td>10 mg/m³ respirable fraction; Smoke and Ducts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>10 mg/m³ Smoke</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>3 mg/m³ respirable fraction; Smoke and Ducts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>10 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³</td>
</tr>
<tr>
<td>1305-78-8</td>
<td>Calcium oxide</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: OSHA: TWA</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>
10. Stability and reactivity

Reactivity: no data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid: No data available

Incompatible materials: No data available

Hazardous decomposition products:

On heating or in case of fire toxic gases may form.

Thermal decomposition: No data available
11. Toxicological information

Toxicological tests
Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
- Acute toxicity (oral): Lack of data.
- Acute toxicity (dermal): Lack of data.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Lack of data.
- Eye damage/irritation: Lack of data.
- Sensitisation to the respiratory tract: Lack of data.
- Skin sensitisation: Lack of data.
- Germ cell mutagenicity/Genotoxicity: Lack of data.
- Carcinogenicity: Lack of data.
- Reproductive toxicity: Lack of data.
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Lack of data.
- Specific target organ toxicity (repeated exposure): Lack of data.
- Aspiration hazard: Lack of data.

Other information:
- Chronic toxicity carcinogenic effect:
- Information about Titanium dioxide:
  - IARC Rating: Group 2B
  - OSHA Carcinogen: not listed
  - NTP Rating: not listed
- Information about Diiron trioxide:
  - IARC Rating: Group 3
  - OSHA Carcinogen: not listed
  - NTP Rating: not listed
- Information about silicon dioxide:
  - IARC Rating: Group 3
  - OSHA Carcinogen: not listed
  - NTP Rating: not listed
- Information about Quartz (SiO2):
  - IARC Rating: Group 1
  - OSHA Carcinogen: not listed
  - NTP Rating: listed

12. Ecological information

Ecotoxicity
Further details: No data available

Mobility in soil
No data available
Persistence and degradability

Further details: No data available

Additional ecological information

General information: Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product
Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging
Recommendation: Dispose of waste according to applicable legislation. Packing can be recycled or disposed of.

14. Transport information

USA: Department of Transportation (DOT)
Proper shipping name: Not restricted

Canada: Transportation of Dangerous Goods (TDG)
Shipping name: Not restricted

Sea transport (IMDG)
Proper shipping name: Not restricted
Marine pollutant: no

Air transport (IATA)
Proper shipping name: Not restricted

Further information
No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - Canada
No data available
National regulations - U.S. Federal Regulations

Product: This product is an article as defined by TSCA regulations, and is exempt from TSCA inventory listing requirements.

Aluminium oxide: Other Environmental Laws:
- SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
- NIOSH Recommendations:
  - Occupational Health Guideline: 0021

Silicon carbide: NIOSH Recommendations:
- Occupational Health Guideline: 0555

Quartz (SiO2): Carcinogen Status:
- IARC Rating: Group 1
- OSHA Carcinogen: not listed
- NTP Rating: listed
- NIOSH Recommendations:
  - Occupational Health Guideline: 0553

Titanium dioxide: Carcinogen Status:
- IARC Rating: Group 2B
- OSHA Carcinogen: not listed
- NTP Rating: not listed
- NIOSH Recommendations:
  - Occupational Health Guideline: 0617

Diiron trioxide: Carcinogen Status:
- IARC Rating: Group 3
- OSHA Carcinogen: not listed
- NTP Rating: not listed
- NIOSH Recommendations:
  - Occupational Health Guideline: 0344

Lanthanum oxide: TSCA: listed

Silicon dioxide: Carcinogen Status:
- IARC Rating: Group 3
- OSHA Carcinogen: not listed
- NTP Rating: not listed
- NIOSH Recommendations:
  - Occupational Health Guideline: 0552

Magnesium oxide: NIOSH Recommendations:
- Occupational Health Guideline: 0374

Calcium oxide: NIOSH Recommendations:
- Occupational Health Guideline: 0093
National regulations - U.S. State Regulations

Aluminium oxide: Delaware Air Quality Management List:
   DRQ: 100 - RQ State: State requirement differs from Federal
Massachusetts Haz. Substance codes: F9
Minnesota Haz. Substance:
   Codes: A - Ratings: 10.16 - Status: Title III. TRI.
New Jersey RTK Hazardous Substance:
   DOT: - - Sub No.: 2891 - TPQ: -
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
   TWA: 10 mg

Quartz (SiO2):
   California Proposition 65: cancer
   Rhode Island HSL: listed

Titanium dioxide:
   California Proposition 65: cancer
   Rhode Island HSL: listed

Diiron trioxide:
   Idaho Air Pollutant List:
   Title 585 -- AAC: 0.25 -- EL: 0.333 -- WEL: 5
   Title 586 -
   Massachusetts Haz. Substance codes: 2
   Pennsylvania Haz. Substance code: -
   Washington Air Contaminant:
   TWA: 5 mg

16. Other information

Hazard rating systems:

<table>
<thead>
<tr>
<th>NFPA Hazard Rating:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1 (Slight)</td>
</tr>
<tr>
<td>Fire: 0 (Minimal)</td>
</tr>
<tr>
<td>Reactivity: 0 (Minimal)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Version III Rating:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1 (Slight)</td>
</tr>
<tr>
<td>Flammability: 0 (Minimal)</td>
</tr>
<tr>
<td>Physical Hazard: 0 (Minimal)</td>
</tr>
<tr>
<td>Personal Protection: X = Consult your supervisor</td>
</tr>
</tbody>
</table>

Reason of change:
Changes in section 1: emergency phone number

Date of first version:
13/1/2016

Department issuing data sheet
see section 1: Dept. responsible for information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products.