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

1.1. Product identifier
Product form: Mixture
Product name: GemSeal Black Diamond Sealer; Black Diamond PM; Black Diamond RTU
Product code: Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Sealant

1.3. Details of the supplier of the safety data sheet
GemSeal Pavement Products
3700 Arco Corporate Drive, Suite 425
Charlotte, NC 28273 - USA
T 866-264-8273 Tech Service: Monday - Friday; 8:00am - 5:00pm EST

1.4. Emergency telephone number
Emergency number: CHEMTREC (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin irritation 2

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US): ☢️

Signal word (GHS-US): Warning
Hazard statements (GHS-US): Causes skin irritation.
Precautionary statements (GHS-US): Wash hands thoroughly after handling. Wear protective gloves. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
2 % of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residues, petroleum, steam-cracked</td>
<td>(CAS No) 64742-90-1</td>
<td>15 - 40</td>
<td>Flam. Liq 4  Skin Irrit. 2</td>
</tr>
<tr>
<td>Quartz</td>
<td>(CAS No) 14808-60-7</td>
<td>5 - 10</td>
<td>Acute Tox. 4 (Oral)</td>
</tr>
<tr>
<td>Mica</td>
<td>(CAS No) 12001-26-2</td>
<td>3 - 7</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aluminum silicate</td>
<td>(CAS No) 1327-36-2</td>
<td>1 - 5</td>
<td>Skin Irrit. 2  Eye Irrit. 2A</td>
</tr>
<tr>
<td>Feldspar</td>
<td>(CAS No) 68476-25-5</td>
<td>1 - 5</td>
<td>Eye Irrit. 2A  STOT SE 3</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>(CAS No) 13463-67-7</td>
<td>0.1 - 1</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid measures after ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: May cause respiratory irritation.

Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion: May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Treat for surrounding material.

Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: May include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Protection during firefighting: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Scoop up material and place in a disposal container.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Avoid breathing vapour or mist. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep out of the reach of children. Keep container tightly closed.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**Residues, petroleum, steam-cracked (64742-90-1)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Quartz (14808-60-7)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>((10 mg/m³)/(%SiO2+2) TWA (resp)); ((30 mg/m³)/(%SiO2+2) TWA (total)); ((250)/(%SiO2+5) mppcf TWA (resp))</td>
</tr>
</tbody>
</table>

**Mica (12001-26-2)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>3 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>20 mppcf (respirable dust)</td>
</tr>
</tbody>
</table>

**Aluminum silicate (1327-36-2)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Feldspar (68476-25-5)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Titanium dioxide (13463-67-7)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>15 mg/m³</td>
</tr>
</tbody>
</table>

**Benzo(a)pyrene (50-32-8)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (mg/m³)</th>
<th>USA OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>0.2 mg/m³</td>
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</tbody>
</table>

**Naphthalene (91-20-3)**

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (ppm)</th>
<th>USA ACGIH STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>15 ppm</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

**8.2. Exposure controls**

- **Appropriate engineering controls**: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- **Hand protection**: Wear suitable gloves.
- **Eye protection**: Safety glasses or goggles are recommended when using product.
- **Skin and body protection**: Wear suitable protective clothing.
- **Respiratory protection**: In case of insufficient ventilation, wear suitable respiratory equipment.
- **Environmental exposure controls**: Maintain levels below Community environmental protection thresholds.
- **Other information**: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

- **Physical state**: Liquid.
- **Appearance**: No data available.
- **Colour**: No data available.
Odour: No data available.
Odour threshold: No data available.
pH: No data available.
Relative evaporation rate (butylacetate=1): No data available.
Melting point: No data available.
Freezing point: No data available.
Boiling point: No data available.
Flash point: No data available.
Self ignition temperature: No data available.
Decomposition temperature: No data available.
Flammability (solid, gas): Not flammable.
Vapour pressure: No data available.
Relative vapour density at 20 °C: No data available.
Relative density: No data available.
Solubility: No data available.
Log Pow: No data available.
Log Kow: No data available.
Viscosity, kinematic: No data available.
Viscosity, dynamic: No data available.
Explosive properties: No data available.
Oxidising properties: No data available.
Explosive limits: No data available.

9.2. Other information
VOC content: No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under normal storage conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Heat. Incompatible materials.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>GemSeal Black Diamond Sealer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>Not available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residues, petroleum, steam-cracked (64742-90-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quartz (14808-60-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
</tbody>
</table>

GemSeal Black Diamond Sealer
Safety Data Sheet
GemSeal Black Diamond Sealer
Safety Data Sheet

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>&gt; 10000 mg/kg</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Naphthalene (91-20-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>490 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt;20 g/kg</td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>&gt; 340 mg/m³/1h</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.

Quartz (14808-60-7)
IARC group: 1 - Carcinogenic to humans (airborne particles of respirable size)
National Toxicity Program (NTP) Status: 2 - Known Human Carcinogens

Titanium dioxide (13463-67-7)
IARC group: 2B - Possibly carcinogenic to humans (airborne, unbound particles of respirable size)
National Toxicity Program (NTP) Status: 1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen

Naphthalene (91-20-3)
IARC group: 2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status: 1 - Carcinogenic to humans

Benzo(a)pyrene (50-32-8)
IARC group: 1 - Carcinogenic to humans
National Toxicity Program (NTP) Status: 3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation: May cause respiratory irritation.
Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion: May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

12.2. Persistence and degradability
GemSeal Black Diamond Sealer
Persistence and degradability: No additional information available.

12.3. Bioaccumulative potential
GemSeal Black Diamond Sealer
Bioaccumulative potential: No additional information available.

12.4. Mobility in soil
GemSeal Black Diamond Sealer
Ecology - soil: No additional information available.

12.5. Other adverse effects
Other adverse effects: No additional information available.
Effect on ozone layer: No additional information available.
Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
No additional information available

SECTION 14: Transport information

In accordance with DOT
14.1. UN number
Not applicable
14.2. UN proper shipping name
Not applicable
14.3. IATA / IMDG
Hazard Class: 9  Packing Group: III
14.4. Additional information
Other information: No supplementary information available.
Special transport precautions: Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica</td>
<td>12001-26-2</td>
</tr>
</tbody>
</table>

Naphthalene (91-20-3)
Listed on SARA Section 313 (Specific toxic chemical listings)

<table>
<thead>
<tr>
<th>EPA TSCA Regulatory Flag</th>
<th>SARA Section 313 - Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>T - T</td>
<td>0.1 %</td>
</tr>
</tbody>
</table>

Benzo(a)pyrene (50-32-8)
Listed on SARA Section 313 (Specific toxic chemical listings)

<table>
<thead>
<tr>
<th>SARA Section 313 - Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 %</td>
</tr>
</tbody>
</table>

15.2. US State regulations

GemSeal Black Diamond Sealer
State or local regulations: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Indication of changes: Addition of the names "Black Diamond PM" and "Black Diamond RTU" under Section 1.1 (06/07/2017)

Date of issue: 06/07/2017


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