This is a kit that contains the following components:
DURAL INJECTION GEL 1:1 PART A
DURAL INJECTION GEL 1:1 PART B
1. Identification

Product identifier: DURAL INJECTION GEL 1:1 PART A
Product Code: 051DI 04

Recommended use and restriction on use
   Recommended use: Sealant
   Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person: EH&S Department
Telephone: 216-531-9222
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification
Health Hazards
   Skin Corrosion/Irritation Category 2
   Serious Eye Damage/Eye Irritation Category 2A
   Skin sensitizer Category 1
   Germ Cell Mutagenicity Category 2

Unknown toxicity - Health
   Acute toxicity, oral 5.99 %
   Acute toxicity, dermal 6.15 %
   Acute toxicity, inhalation, vapor 95.21 %
   Acute toxicity, inhalation, dust or mist 91.8 %

Environmental Hazards
   Acute hazards to the aquatic environment Category 2
   Chronic hazards to the aquatic environment Category 2

Unknown toxicity - Environment
   Acute hazards to the aquatic environment 11.11 %
Chronic hazards to the aquatic environment 9.89 %

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing genetic defects. Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water/… If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse. Collect spillage.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures
### Chemical Identity

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A Polyglycidyl Ether Resin</td>
<td>25068-38-6</td>
<td>50 - &lt;100%</td>
</tr>
<tr>
<td>o-Cresyl glycidyl ether</td>
<td>2210-79-9</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Wollastonite</td>
<td>13983-17-0</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Epichlorohydrin polymer</td>
<td>25085-99-8</td>
<td>1 - &lt;2.5%</td>
</tr>
<tr>
<td>Heavy aromatic naphtha</td>
<td>64742-94-5</td>
<td>0.1 - &lt;1%</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>9002-88-4</td>
<td>0.1 - &lt;1%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Description of necessary first-aid measures

**Inhalation:** Move to fresh air.

**Skin Contact:** Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Personal Protection for First-aid Responders:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

**Hazards:** No data available.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** Symptoms may be delayed.

### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Safe handling advice: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Avoid contact with eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with skin. Avoid contact with eyes, skin, and clothing.

Contact avoidance measures: No data available.

Hygiene measures: Observe good industrial hygiene practices. Avoid contact with eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

Storage

Safe storage conditions: Store locked up.

Safe packaging materials: No data available.
## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>Titanium dioxide - Total dust.</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Titanium dioxide - Respirable fraction.</td>
<td>TWA</td>
<td>15 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>Titanium dioxide - Total dust.</td>
<td>TWA</td>
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<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>Titanium dioxide - Respirable fraction.</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>Titanium dioxide - Total dust.</td>
<td>TWA</td>
<td>50 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>Heavy aromatic naphtha - Non-aerosol. - as total hydrocarbon vapor</td>
<td>TWA</td>
<td>200 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2014)</td>
</tr>
<tr>
<td>Polyethylene - Inhalable particles.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2015)</td>
</tr>
<tr>
<td>Polyethylene - Respirable particles.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2015)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>US. OSHA Table Z-T Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Polyethylene - Total dust.</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>US. OSHA Table Z-T Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
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<tr>
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<td>TWA</td>
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<td>TWA</td>
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<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Titanium dioxide - Total dust.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
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</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Wollastonite - fibers, total dust</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Wollastonite - Fiber.</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
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<td>TWA</td>
<td>200 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Heavy aromatic naphtha</td>
<td>TWA</td>
<td>525 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)</td>
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<tr>
<td>Polyethylene - Total dust.</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)</td>
</tr>
<tr>
<td>Polyethylene - Inhalable fraction.</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 2015)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Polyethylene - Total dust.</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Aluminum hydroxide - Respirable.</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
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<td>Aluminum hydroxide - Total dust.</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
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<td>Aluminum hydroxide - Respirable fraction.</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Aluminum hydroxide - Total dust.</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Substance</td>
<td>TWA</td>
<td>Limit</td>
<td>Source</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Amorphous silica - Total</td>
<td>TWA</td>
<td>4 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Amorphous silica - Respirable.</td>
<td>TWA</td>
<td>1.5 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Amorphous silica - Respirable dust.</td>
<td>TWA</td>
<td>6 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Carbon Black - Inhalable</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2017)</td>
</tr>
<tr>
<td>Carbon Black - Inhalable fraction.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
</tbody>
</table>

**Exposure guidelines**

<table>
<thead>
<tr>
<th>Substance</th>
<th>US. ACGIH Threshold Limit Values</th>
<th>Can be absorbed through the skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy aromatic naphtha</td>
<td></td>
<td>Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.</td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:** Use suitable protective gloves if risk of skin contact.

**Other:** Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Avoid contact with eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties
Appearance
- Physical state: liquid
- Form: liquid
- Color: Gray
- Odor: Mild
- Odor threshold: No data available.
- pH: No data available.
- Melting point/freezing point: No data available.
- Initial boiling point and boiling range: No data available.
- Flash Point: > 93 °C > 200 °F (Setaflash Closed Cup)
- Evaporation rate: Slower than Ether
- Flammability (solid, gas): No

Upper/lower limit on flammability or explosive limits
- Flammability limit - upper (%): No data available.
- Flammability limit - lower (%): No data available.
- Explosive limit - upper (%): No data available.
- Explosive limit - lower (%): No data available.

Vapor pressure: No data available.
Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.

Relative density: 1.13

Solubility(ies)
- Solubility in water: Insoluble in water
- Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.
Decomposition temperature: No data available.

10. Stability and reactivity
- Reactivity: No data available.
- Chemical Stability: Material is stable under normal conditions.
- Possibility of hazardous reactions: No data available.
- Conditions to avoid: Avoid heat or contamination.
- Incompatible Materials: No data available.
- Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information
Information on likely routes of exposure
Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

- Bisphenol A Polyglycidyl Ether Resin LD 50 (Rat): > 2,000 mg/kg
- o-Cresyl glycidyl ether LD 50 (Rat): > 5,000 mg/kg
- Heavy aromatic naphtha LD 50 (Rat): 5,000 mg/kg
- Polyethylene LD 50 (Rabbit): 5,001 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

- Bisphenol A Polyglycidyl Ether Resin LD 50 (Rat): > 2,000 mg/kg
- o-Cresyl glycidyl ether LD 50 (Rat): > 2,000 mg/kg
- Heavy aromatic naphtha LD 50 (Rat): > 2,000 mg/kg
- Polyethylene LD 50 (Rabbit): 5,001 mg/kg
<table>
<thead>
<tr>
<th><strong>Inhalation</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product:</strong></td>
<td>Not classified for acute toxicity based on available data.</td>
</tr>
<tr>
<td><strong>Specified substance(s):</strong></td>
<td></td>
</tr>
<tr>
<td>o-Cresyl glycidyl ether</td>
<td>LC 50 (Rat): 6,090 mg/m3</td>
</tr>
<tr>
<td>Heavy aromatic naphtha</td>
<td>LC 50 (Rat): 25.7 mg/l</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>LC 50 (Rabbit): 20.1 mg/l</td>
</tr>
</tbody>
</table>

| **Repeated dose toxicity** |  |
| **Product:** | No data available. |

| **Skin Corrosion/Irritation** |  |
| **Product:** | No data available. |
| **Specified substance(s):** |  |
| Bisphenol A | Irritating. |
| Polyglycidyl Ether Resin | in vivo (Rabbit): Slightly irritating |
| o-Cresyl glycidyl ether | in vivo (Rabbit): Moderately irritating |
| Heavy aromatic naphtha | in vivo (Rabbit): Irritating |

| **Serious Eye Damage/Eye Irritation** |  |
| **Product:** | No data available. |
| **Specified substance(s):** |  |
| Bisphenol A | Strongly irritating. |
| Polyglycidyl Ether Resin | Rabbit, 24 hrs: Slightly irritating |
| Heavy aromatic naphtha | Rabbit, 24 - 72 hrs: Not irritating |

| **Respiratory or Skin Sensitization** |  |
| **Product:** | No data available. |

| **Carcinogenicity** |  |
| **Product:** | No data available. |
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
Bisphenol A Polyglycidyl Ether Resin
LC 50 (Oncorhynchus mykiss, 96 h): 2 mg/l Experimental result, Key study

Aquatic Invertebrates
Product: No data available.

Specified substance(s): Bisphenol A Polyglycidyl Ether Resin
EC 50 (Daphnia magna, 48 h): 1.8 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s): Heavy aromatic naphtha
NOAEL (Oncorhynchus mykiss, 28 d): 0.098 mg/l QSAR QSAR, Key study

Aquatic Invertebrates
Product: No data available.

Specified substance(s): Bisphenol A Polyglycidyl Ether Resin
NOEC (Daphnia magna, 21 d): 0.3 mg/l Experimental result, Key study

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)
Product: No data available.

Specified substance(s): Bisphenol A Polyglycidyl Ether Resin
Bioconcentration Factor (BCF): 31 Aquatic sediment QSAR, Key study

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s): Bisphenol A Polyglycidyl Ether Resin
Log Kow: 2.64 - 3.78 25 °C Yes Experimental result, Key study

Mobility in soil: No data available.

Other adverse effects: Toxic to aquatic life with long lasting effects.
13. Disposal considerations

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:
Not Regulated

CFR / DOT:
Not Regulated

IMDG:
Not Regulated

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):
None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Respiratory or Skin Sensitization
Germ Cell Mutagenicity
SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification
None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A Polyglycidyl Ether Resin</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>o-Cresyl glycidyl ether</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Wollastonite</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Epichlorohydrin polymer</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Heavy aromatic naphtha</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

WARNING
Cancer - www.P65Warnings.ca.gov

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
Titanium dioxide

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Titanium dioxide

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable
Rotterdam convention  
Not applicable

Kyoto protocol  
Not applicable

**VOC:** When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 94 g/l

<table>
<thead>
<tr>
<th>Regulatory VOC (less water and exempt solvent)</th>
<th>7 g/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC Method 310</td>
<td>0.63 %</td>
</tr>
</tbody>
</table>
**Inventory Status:**

- **Australia AICS:** All components in this product are listed on or exempt from the Inventory.

- **Canada DSL Inventory List:** One or more components in this product are not listed on or exempt from the Inventory.

- **EINECS, ELINCS or NLP:** One or more components in this product are not listed on or exempt from the Inventory.

- **Japan (ENCS) List:** One or more components in this product are not listed on or exempt from the Inventory.

- **China Inv. Existing Chemical Substances:** All components in this product are listed on or exempt from the Inventory.

- **Korea Existing Chemicals Inv. (KECI):** All components in this product are listed on or exempt from the Inventory.

- **Canada NDSL Inventory:** One or more components in this product are not listed on or exempt from the Inventory.

- **Philippines PICCS:** All components in this product are listed on or exempt from the Inventory.

- **US TSCA Inventory:** One or more components in this product are not listed on or exempt from the Inventory.

- **New Zealand Inventory of Chemicals:** All components in this product are listed on or exempt from the Inventory.

- **Japan ISHL Listing:** One or more components in this product are not listed on or exempt from the Inventory.

- **Japan Pharmacopoeia Listing:** One or more components in this product are not listed on or exempt from the Inventory.

---

### 16. Other information, including date of preparation or last revision

**Revision Date:** 04/19/2019

**Version #:** 5.0

**Further Information:** No data available.
Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.
SAFETY DATA SHEET

1. Identification

Product identifier: DURAL INJECTION GEL 1:1 PART B
Product Code: 051DI 04

Recommended use and restriction on use

Recommended use: Curative
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person: EH&S Department
Telephone: 216-531-9222
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (Oral)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity (Inhalation - vapor)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Toxic to reproduction</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Unknown toxicity - Health

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, oral</td>
<td>14.53 %</td>
</tr>
<tr>
<td>Acute toxicity, dermal</td>
<td>37.54 %</td>
</tr>
<tr>
<td>Acute toxicity, inhalation, vapor</td>
<td>90.06 %</td>
</tr>
<tr>
<td>Acute toxicity, inhalation, dust or mist</td>
<td>88.18 %</td>
</tr>
</tbody>
</table>

Environmental Hazards

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute hazards to the aquatic environment</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Unknown toxicity - Environment

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute hazards to the aquatic environment</td>
<td>67.09 %</td>
</tr>
<tr>
<td>Chronic hazards to the aquatic environment</td>
<td>100 %</td>
</tr>
</tbody>
</table>
Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement: Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye damage. Suspected of damaging fertility or the unborn child. Toxic to aquatic life.

Precautionary Statements

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water/... If skin irritation occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTRE/doctor/... if you feel unwell. Rinse mouth. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

000000019938
4. First-aid measures

Description of necessary first-aid measures

Inhalation: Move to fresh air.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-aid Responders: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Most important symptoms/effects, acute and delayed

Symptoms: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Safe handling advice: Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not taste or swallow. Wash hands thoroughly after handling. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with skin.

Contact avoidance measures: No data available.

Hygiene measures: Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product.

Storage

Safe storage conditions: Store locked up.
Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylenediamine</td>
<td>Ceiling</td>
<td>0.1 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>Polyethylene - Inhalable particles.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2015)</td>
</tr>
<tr>
<td>Polyethylene - Respirable particles.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2015)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Polyethylene - Total dust.</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>15 mg/m³</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>50 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>15 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
</tbody>
</table>

None of the components have assigned exposure limits.
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wollastonite - fibers, total dust</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Wollastonite - Fiber.</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>m-Xylenediamine</td>
<td>CEILING</td>
<td>0.1 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>m-Xylenediamine</td>
<td>CEV</td>
<td>0.1 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>m-Xylenediamine</td>
<td>CEILING</td>
<td>0.1 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)</td>
</tr>
<tr>
<td>Polyethylene - Total dust.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)</td>
</tr>
<tr>
<td>Polyethylene - Inhalable fraction.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (08 2015)</td>
</tr>
<tr>
<td>Polyethylene - Respirable fraction.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Polyethylene - Total dust.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Hexamethylenediamine</td>
<td>TWA</td>
<td>0.5 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Hexamethylenediamine</td>
<td>TWA</td>
<td>0.5 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Hexamethylenediamine</td>
<td>TWA</td>
<td>0.5 ppm</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)/Silica Sand - Respirable fraction.</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)/Silica Sand - Respirable fraction.</td>
<td>TWA</td>
<td>0.10 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)/Silica Sand - Respirable dust.</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Stoddard solvent (Mineral Spirits)</td>
<td>STEL</td>
<td>580 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>290 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
</tbody>
</table>
### Exposure guidelines

<table>
<thead>
<tr>
<th>Substance</th>
<th>Type</th>
<th>Limit</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoddard solvent (Mineral Spirits)</td>
<td>TWA</td>
<td>100 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Stoddard solvent (Mineral Spirits)</td>
<td>TWA</td>
<td>100 ppm</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
<tr>
<td>Carbon Black - Inhalable fraction.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td>Canada. Quebec OELs. (Control of Exposure to Biological or Chemical Agents) (08 2015)</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>1-Methoxy-2-propanol acetate</td>
<td>TWA</td>
<td>50 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>1-Methoxy-2-propanol acetate</td>
<td>STEL</td>
<td>75 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>TWA</td>
<td>25 ppm</td>
<td>Canada. Alberta OELs (Occupational Health &amp; Safety Code, Schedule 1, Table 2) (07 2009)</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>TWA</td>
<td>25 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>TWA</td>
<td>25 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>TWA</td>
<td>25 ppm</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
</tbody>
</table>

**Exposure guidelines**

- **m-Xylenediamine**
  - US. ACGIH Threshold Limit Values
  - Can be absorbed through the skin.

**Appropriate Engineering Controls**

- Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

- **General information:** Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

- **Eye/face protection:** Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

- **Skin Protection:**
  - **Hand Protection:** Use suitable protective gloves if risk of skin contact.

- **Other:** Wear suitable protective clothing. Wear chemical-resistant gloves, footwear,
and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product.

### 9. Physical and chemical properties

**Appearance**

- **Physical state:** liquid
- **Form:** liquid
- **Color:** Black
- **Odor:** Mild pungent
- **Odor threshold:** No data available.
- **pH:** No data available.
- **Melting point/freezing point:** No data available.
- **Initial boiling point and boiling range:** No data available.
- **Flash Point:** > 93 °C > 200 °F (Setaflash Closed Cup)
- **Evaporation rate:** Slower than Ether
- **Flammability (solid, gas):** No

**Upper/lower limit on flammability or explosive limits**

- **Flammability limit - upper (%):** No data available.
- **Flammability limit - lower (%):** No data available.
- **Explosive limit - upper (%):** No data available.
- **Explosive limit - lower (%):** No data available.

**Vapor pressure:** No data available.

**Vapor density:** Vapors are heavier than air and may travel along the floor and in the bottom of containers.

**Relative density:** 1.007

**Solubility(ies)**

- **Solubility in water:** Practically Insoluble
- **Solubility (other):** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Auto-ignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** No data available.

### 10. Stability and reactivity

**Reactivity:** No data available.
Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: Avoid contact with acids.

Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: May be harmful in contact with skin. Causes skin irritation.

Eye contact: Causes serious eye damage.

Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 1,830.59 mg/kg

Dermal Product: ATEmix: 4,177.26 mg/kg

Inhalation Product: ATEmix: 11.03 mg/l

Repeated dose toxicity Product: No data available.
Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
- 1,2-Cyclohexanediamine in vivo (Rabbit): Category 1A
- 4-Nonylphenol in vivo (Rabbit): Category 1B
- Benzyl alcohol in vivo (Rabbit): Not irritant
- 4-tert-Butylphenol in vivo (Rabbit): Highly irritating
- m-Xylenediamine in vivo (Rat): Corrosive
- 1,3-Cyclohexanedimethane in vivo (Rabbit): Corrosive

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
- 4-Nonylphenol Rabbit, 24 - 72 hrs: Corrosive
- 4-tert-Butylphenol Rabbit, 24 hrs: Category 1

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.
Reproductive toxicity
Product: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
4-Nonylphenol LC 50 (Fathead minnow (Pimephales promelas), 96 h): 0.13825 mg/l
Mortality
Benzyl alcohol LC 50 (Fathead minnow (Pimephales promelas), 96 h): 460 mg/l Mortality
4-tert-Butylphenol LC 50 (Fathead minnow (Pimephales promelas), 96 h): 4.71 - 5.62 mg/l
Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Benzyl alcohol EC 50 (Daphnia magna, 48 h): 230 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
4-Nonylphenol NOAEL (Oncorhynchus mykiss, 91 d): 0.006 mg/l Experimental result, Key study

Aquatic Invertebrates
Product: No data available.
Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Specified substance(s):
4-Nonylphenol
Fathead minnow (Pimephales promelas), Bioconcentration Factor (BCF): 988 (Flow through)

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s):
Benzyl alcohol
Log Kow: 1.10

Mobility in soil: No data available.

Other adverse effects: Toxic to aquatic organisms.

13. Disposal considerations

Disposal methods:
Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:
UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nonylphenol), 9, PG III

CFR / DOT:
UN3082, Environmentally hazardous substance, liquid, n.o.s. (Nonylphenol), 9, PG III
IMDG:

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nonylphenol), 9, PG III, MARINE POLLUTANT

**Further Information:**
The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol</td>
<td>De minimis concentration: TSCA 5(a)(2)% One-Time Export Notification only.</td>
</tr>
<tr>
<td>Nonyl Phenol</td>
<td>De minimis concentration: TSCA 5(a)(2)% One-Time Export Notification only.</td>
</tr>
</tbody>
</table>

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.


<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>OSHA hazard(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica</td>
<td>kidney effects</td>
</tr>
<tr>
<td>(Quartz)/ Silica Sand</td>
<td>lung effects</td>
</tr>
<tr>
<td></td>
<td>immune system effects</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
</tr>
</tbody>
</table>

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate (Acute) Health Hazards  
Delayed (Chronic) Health Hazard  
Acute toxicity (any route or exposure)  
Skin Corrosion or Irritation  
Serious eye damage or eye irritation  
Reproductive toxicity

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.
### SARA 311/312 Hazardous Chemicals

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Cyclohexanediocline</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>4-Nonylphenol</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>4-tert-Butylphenol</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>m-Xylenediamine</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>1,3-Cyclohexanedimethanamine</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

### SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol</td>
</tr>
<tr>
<td>Nonyl Phenol</td>
</tr>
</tbody>
</table>

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

### US State Regulations

#### US. California Proposition 65

WARNING
Cancer - www.P65Warnings.ca.gov

#### US. New Jersey Worker and Community Right-to-Know Act

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylenediamine</td>
</tr>
</tbody>
</table>

#### US. Massachusetts RTK - Substance List

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
</tr>
<tr>
<td>m-Xylenediamine</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)/ Silica Sand</td>
</tr>
</tbody>
</table>

#### US. Pennsylvania RTK - Hazardous Substances

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
</tr>
<tr>
<td>m-Xylenediamine</td>
</tr>
</tbody>
</table>

#### US. Rhode Island RTK

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylenediamine</td>
</tr>
</tbody>
</table>
Montreal protocol  
Not applicable

Stockholm convention  
Not applicable

Rotterdam convention  
Not applicable

Kyoto protocol  
Not applicable

VOC: When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 
94 g/l  
Regulatory VOC (less water and exempt solvent) : 171 g/l  
VOC Method 310 : 16.97 %
**Inventory Status:**

<table>
<thead>
<tr>
<th>Country/Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia AICS</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada DSL Inventory List:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>EINECS, ELINCS or NLP:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan (ENCS) List:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>China Inv. Existing Chemical Substances:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Korea Existing Chemicals Inv. (KECI):</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada NDSL Inventory:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Philippines PICCS:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>US TSCA Inventory:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>New Zealand Inventory of Chemicals:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan ISHL Listing:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan Pharmacopoeia Listing:</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
</tbody>
</table>

16. **Other information, including date of preparation or last revision**

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>04/19/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version #:</td>
<td>5.0</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
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