SAFETY DATA SHEET

1. Identification

Product identifier: DEVCON® HV Tile Adhesive Resin

Other means of identification:

SKU#: 0147

Recommended use: Not available.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:

Company name: ITW Performance Polymers
Address: 35 Brownridge Rd
Unit 1
Halton Hills, ON L7G 0C6

Contact person: Customer Service
Telephone number: 978-777-1100
Fax
E-mail
Emergency telephone number: 800-424-9300
Supplier: Not available.

2. Hazard identification

Physical hazards: Not classified.

Health hazards:
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2A
- Sensitization, skin: Category 1

Environmental hazards: Not classified.

Label elements:

Signal word: Warning

Hazard statement: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statement:

Prevention: Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage: Store away from incompatible materials.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards: None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling
Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection

**Occupational exposure limits**  
No exposure limits noted for ingredient(s).

**Biological limit values**  
No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**  
Good general ventilation 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. Provide eyewash station and safety shower.

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

**Eye/face protection**  
Face shield is recommended. Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection**  
Wear appropriate chemical resistant gloves.

**Other**  
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**  
In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**  
Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**  
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

**Appearance**  
Viscous. Liquid.

**Physical state**  
Liquid.

**Form**  
Viscous. Liquid.

**Colour**  
Not available.

**Odour**  
Slight.

**Odour threshold**  
Not available.

**pH**  
Not available.

**Melting point/freezing point**  
Not available.

**Initial boiling point and boiling range**  
320 °C (608 °F) estimated

**Flash point**  
129.4 °C (265.0 °F) estimated

**Evaporation rate**  
Not available.

**Flammability (solid, gas)**  
Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)**  
Not available.

**Flammability limit - upper (%)**  
Not available.

**Explosive limit - lower (%)**  
Not available.

**Explosive limit – upper (%)**  
Not available.

**Vapour pressure**  
Not available.

**Vapour density**  
Not available.

**Relative density**  
Not available.

**Solubility(ies)**

**Solubility (water)**  
Not available.

**Partition coefficient (n-octanol/water)**  
Not available.

**Auto-ignition temperature**  
Not available.

**Decomposition temperature**  
Not available.

**Viscosity**  
Not available.
10. Stability and reactivity

**Reactivity**  
The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability**  
Material is stable under normal conditions.

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

**Conditions to avoid**  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

**Incompatible materials**  
Strong oxidising agents.

**Hazardous decomposition products**  
No hazardous decomposition products are known.

11. Toxicological information

**Information on likely routes of exposure**

- **Inhalation**  
  No adverse effects due to inhalation are expected.

- **Skin contact**  
  Causes skin irritation. May cause an allergic skin reaction.

- **Eye contact**  
  Causes serious eye irritation.

- **Ingestion**  
  Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

**Information on toxicological effects**

- **Acute toxicity**  
  Not known.

- **Skin corrosion/irritation**  
  Causes skin irritation.

- **Serious eye damage/eye irritation**  
  Causes serious eye irritation.

- **Respiratory or skin sensitisation**
  
  - **Respiratory sensitisation**  
    Not a respiratory sensitizer.

  - **Skin sensitisation**  
    May cause an allergic skin reaction.

- **Germ cell mutagenicity**  
  No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

- **Carcinogenicity**  
  Not available.

- **Reproductive toxicity**  
  This product is not expected to cause reproductive or developmental effects.

- **Specific target organ toxicity - single exposure**  
  Not classified.

- **Specific target organ toxicity - repeated exposure**  
  Not classified.

- **Aspiration hazard**  
  Not an aspiration hazard.

12. Ecological information

**Ecotoxicity**  
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability**  
No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**  
No data available.

**Mobility in soil**  
No data available.

**Other adverse effects**  
The product contains volatile organic compounds which have a photochemical ozone creation potential.
13. Disposal considerations

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG: Not regulated as dangerous goods.

IATA: Not regulated as dangerous goods.

IMDG: Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established.

15. Regulatory information

Canadian regulations: This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

- Controlled Drugs and Substances Act: Not regulated.
- Greenhouse Gases: Not listed.
- Precursor Control Regulations: Not regulated.

International regulations

- Stockholm Convention: Not applicable.
- Rotterdam Convention: Not applicable.
- Kyoto Protocol: Not applicable.
- Montreal Protocol: Not applicable.
- Basel Convention: Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).*

*A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).*

### 16. Other information

<table>
<thead>
<tr>
<th>Issue date</th>
<th>28-May-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>29-April-2020</td>
</tr>
<tr>
<td>Version No.</td>
<td>02</td>
</tr>
</tbody>
</table>

**Disclaimer**

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
SAFETY DATA SHEET

1. Identification

Product identifier: DEVCON® HV Tile Adhesive Hardener SA

Other means of identification

SKU#: 5060

Recommended use: Not available.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Company name: ITW Performance Polymers

Address:
35 Brownridge Rd
Unit 1
Halton Hills, ON L7G 0C6

Contact person: Customer Service

Telephone number: 978-777-1100

Fax: Not available.

E-mail: Not available.

Emergency telephone number: 800-424-9300

Supplier: Not available.

2. Hazard identification

Physical hazards: Not classified.

Health hazards

- Acute toxicity, oral: Category 4
- Acute toxicity, dermal: Category 4
- Skin corrosion/irritation: Category 1
- Serious eye damage/eye irritation: Category 1
- Sensitization, skin: Category 1
- Reproductive toxicity: Category 2

Environmental hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or the unborn child.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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. Immediately call a POISON CENTRE/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate</td>
<td></td>
<td>1317-65-3</td>
<td>15 - 40</td>
</tr>
<tr>
<td>Fatty Acids, C18-unsatd., Dimers, Oligomeric Reaction Products With Tall-oil Fatty Acids And Triethylenetetramine</td>
<td>Polyamide resin</td>
<td>68082-29-1</td>
<td>10 - 30</td>
</tr>
<tr>
<td>NONYL PHENOL</td>
<td></td>
<td>84852-15-3</td>
<td>10 - 30</td>
</tr>
<tr>
<td>N-Aminoethylpiperazine</td>
<td></td>
<td>140-31-8</td>
<td>7 - 13</td>
</tr>
<tr>
<td>TRIETHYLENETETRAMINE</td>
<td>TETA</td>
<td>112-24-3</td>
<td>3 - 7</td>
</tr>
<tr>
<td>Silica, amorphous, fumed Silica, amorphous, fumed, cryst.-free</td>
<td></td>
<td>112945-52-5</td>
<td>1 - 5</td>
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<tr>
<td>Titanium dioxide</td>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>0.5 - 1.5</td>
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<tr>
<td>SILICA, CRYSTALLINE, QUARTZ</td>
<td></td>
<td>14808-60-7</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>10 - 30</td>
</tr>
</tbody>
</table>

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

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion
Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information
IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Alcohol resistant foam. Powder. Carbon dioxide (CO2).

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
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Use water spray to cool unopened containers.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.
6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Canada. Alberta OELs (Occupational Health &amp; Safety Code, Schedule 1, Table 2)</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (CAS 1317-65-3)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable particles.</td>
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<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
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</table>

<table>
<thead>
<tr>
<th>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)</th>
<th>Components</th>
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<tr>
<td>10 mg/m³</td>
<td>Total dust.</td>
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<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
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<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</td>
<td></td>
</tr>
<tr>
<td>10 mg/m³</td>
<td>Total dust.</td>
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</table>
**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
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<tbody>
<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
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<td>Titanium dioxide (CAS 13463-67-7)</td>
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</table>

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable fraction.</td>
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<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
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<tr>
<td>TRIETHYLENETETRAMINE (CAS 112-24-3)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>0.5 ppm</td>
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**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
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</thead>
<tbody>
<tr>
<td>Calcium carbonate (CAS 1317-65-3)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
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<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
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<td>0.1 mg/m³</td>
<td>Respirable dust.</td>
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<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (CAS 1317-65-3)</td>
<td>15 minute</td>
<td>20 mg/m³</td>
<td></td>
</tr>
<tr>
<td>8 hour</td>
<td></td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)</td>
<td>8 hour</td>
<td>0.05 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>15 minute</td>
<td>20 mg/m³</td>
<td></td>
</tr>
<tr>
<td>8 hour</td>
<td></td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**Biological limit values**

- No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**

**Canada - Ontario OELs: Skin designation**

TRIETHYLENETETRAMINE (CAS 112-24-3)

- Can be absorbed through the skin.

**Appropriate engineering controls**

- Good general ventilation 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 wash facilities and emergency shower must be available when handling this product.

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

- **Eye/face protection**
  - Wear safety glasses with side shields (or goggles) and a face shield.

- **Skin protection**
  - **Hand protection**
    - Wear appropriate chemical resistant gloves.
  - **Other**
    - Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

- **Respiratory protection**
  - In case of insufficient ventilation, wear suitable respiratory equipment.

- **Thermal hazards**
  - Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

- Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Paste</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Solid. Paste</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>White</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Ammoniacal</td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>-10 °C (14 °F) estimated</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>222.22 °C (432 °F) estimated</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>101.0 °C (213.8 °F) estimated</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit – upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>3.09 hPa estimated</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>337.78 °C (640 °F) estimated</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>1.51 g/cm³ estimated</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not explosive</td>
</tr>
<tr>
<td><strong>Oxidising properties</strong></td>
<td>Not oxidising</td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
<td>1.51 estimated</td>
</tr>
<tr>
<td><strong>VOC</strong></td>
<td>100 % Solids</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

**Reactivity**
The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability**
Material is stable under normal conditions.

**Possibility of hazardous reactions**
Hazardous polymerisation does not occur.

**Conditions to avoid**
Contact with incompatible materials.

**Incompatible materials**

**Hazardous decomposition products**
No hazardous decomposition products are known.

### 11. Toxicological information

**Information on likely routes of exposure**

**Inhalation**
May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact
Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.

Eye contact
Causes serious eye damage.

Ingestion
Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity
Harmful in contact with skin. Harmful if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONYL PHENOL (CAS 84852-15-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal</td>
<td>Rabbit</td>
<td>2140 mg/kg</td>
</tr>
<tr>
<td>Oral LD50</td>
<td>Rat</td>
<td>1600 mg/kg</td>
</tr>
<tr>
<td>Silica, amorphous, fumed (CAS 112945-52-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Oral</td>
<td>Rat</td>
<td>&gt; 22500 mg/kg</td>
</tr>
<tr>
<td>TRIETHYLENETETRAMINE (CAS 112-24-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal</td>
<td>Rat</td>
<td>1465 mg/kg</td>
</tr>
<tr>
<td>Oral Liquid</td>
<td>Rat</td>
<td>1716 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Causes severe skin burns and eye damage.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant
Calcium carbonate (CAS 1317-65-3) Irritant
Titanium dioxide (CAS 13463-67-7) Irritant

Respiratory sensitisation
Due to partial or complete lack of data the classification is not possible.

Skin sensitisation
May cause an allergic skin reaction.

Germ cell mutagenicity
Due to partial or complete lack of data the classification is not possible.

Carcinogenicity
Due to partial or complete lack of data the classification is not possible.

ACGIH Carcinogens
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) A2 Suspected human carcinogen.
Titanium dioxide (CAS 13463-67-7) A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected human carcinogen.
Titanium dioxide (CAS 13463-67-7) Not classifiable as a human carcinogen.

Canada - Quebec OELs: Carcinogen category
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Silica, amorphous, fumed (CAS 112945-52-5) 3 Not classifiable as to carcinogenicity to humans.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.
Reproductive toxicity
Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure
Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure
Due to partial or complete lack of data the classification is not possible.

Aspiration hazard
Due to partial or complete lack of data the classification is not possible.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Partition coefficient n-octanol / water (log Kow)</th>
<th>NONYL PHENOL</th>
<th>5.71</th>
</tr>
</thead>
</table>

Mobility in soil
No data available.

Other adverse effects
The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3263</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (N-Aminoethylpiperazine), Limited Quantity</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
</tr>
<tr>
<td>Class</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3263</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Corrosive solid, basic, organic, n.o.s. (N-Aminoethylpiperazine), Limited Quantity</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
</tr>
<tr>
<td>Class</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
</tr>
<tr>
<td>ERG Code</td>
<td>8L</td>
</tr>
</tbody>
</table>

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft
Allowed with restrictions.

Cargo aircraft only
Allowed with restrictions.

IMDG

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3263</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (N-Aminoethylpiperazine), Limited Quantity</td>
</tr>
</tbody>
</table>
Transport hazard class(es)

- Class: 8
- Subsidiary risk: -
- Packing group: III
- Environmental hazards: No.
- Marine pollutant: F-A, S-B

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
IATA
IMDG; TDG

15. Regulatory information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

- Controlled Drugs and Substances Act
  Not regulated.
- Export Control List (CEPA 1999, Schedule 3)
  Not listed.
- Greenhouse Gases
  Not listed.
- Precursor Control Regulations
  Not regulated.

International regulations

- Stockholm Convention
  Not applicable.
- Rotterdam Convention
  Not applicable.
- Kyoto Protocol
  Not applicable.
- Montreal Protocol
  Not applicable.
- Basel Convention
  Not applicable.
### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)*  
*A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).*

### 16. Other information

**Issue date**: 28-May-2019  
**Revision date**: 29-April-2020  
**Version No.**: 02  
**Disclaimer**:  
ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.