EPOXYBOND® POOL PUTTY RESIN BLACK

SDS Preparation Date (mm/dd/yyyy): 05/02/2015

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: EPOXYBOND® POOL PUTTY RESIN BLACK

Product Code(s)

: Z530108, 530317

: Epoxy resin

Use pattern: Consumer use

Recommended restrictions None known.

Chemical family

: Mixture

Name, address, and telephone number of the supplier:

Atlas Minerals and Chemicals Inc.

1227 Valley Road

Mertztown, PA, USA

19539

Supplier’s Telephone # : 610-682-7171

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Solid, stiff putty Characteristic odor.

Most important hazards: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Skin sensitization - Category 1
Carcinogenicity- Category 2
Germ Cell Mutagenicity - Category 2

Label elements

Hazard pictogram(s)

Signal Word

WARNING!

Hazard statement(s)

May cause allergic skin reaction.
Suspected of causing cancer.
Suspected of causing genetic defects.

Precautionary statement(s)
SAFETY DATA SHEET

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing mist or vapors.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/clothing and eye/face protection.
IF exposed or concerned: Get medical attention/advice.
IF ON SKIN: Wash with plenty of soap and water.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification:
Burning produces obnoxious and toxic fumes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause respiratory tract irritation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>Epoxy resin</td>
<td>25068-38-6</td>
<td>15.0 - 20.0</td>
</tr>
<tr>
<td>Trimethylol propane triacylate</td>
<td>TMPTA</td>
<td>15625-89-5</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Amorphous Precipitated Silica</td>
<td>Synthetic Amorphous, Pyrogenic Silica</td>
<td>112945-52-5</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>Quartz, silica</td>
<td>14808-60-7</td>
<td>0.1 - 1.0</td>
</tr>
</tbody>
</table>

Present in white and gray product only

Titanium dioxide                     | Anatase                          | 13463-67-7 | 0.5 - 1.5     |

Present in white product only

Zinc oxide                           | Zinc dioxide                     | 1314-13-2  | 0.5 - 1.5     |

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

**Ingestion**: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

**Inhalation**: IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before re-use.

**Eye contact**: For eye contact, flush with running water for at least 15 minutes. If eye irritation persists, get medical advice/attention.

Most important symptoms and effects, both acute and delayed

: Causes skin irritation. Contact may cause redness, swelling and a painful sensation. May cause respiratory irritation. May cause coughing and breathing difficulties. May cause eye irritation. Symptoms may include tearing, redness and discomfort. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause allergic skin reaction. Symptoms may include redness, itching and swelling. Suspected of causing cancer. Suspected of causing genetic defects.
SAFETY DATA SHEET

Indication of any immediate medical attention and special treatment needed
: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
: Carbon dioxide (CO2); Dry chemical; Alcohol-resistant foam; water fog.

Unsuitable extinguishing media
: Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability
: Not considered flammable.

Flammability classification (OSHA 29 CFR 1910.106)
: Not flammable.

Hazardous combustion products
: Carbon dioxide and carbon monoxide.

Special protective equipment and precautions for firefighters
Protective equipment for fire-fighters
: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures
: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Environmental precautions
: Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

Methods and material for containment and cleaning up
: Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Sweep up and shovel into suitable containers for disposal. Pick up and transfer to properly labelled containers. Contact the proper local authorities. Refer to Section 13 for disposal of contaminated material.

Special spill response procedures
: Contact appropriate local and provincial environmental authorities for assistance and/or reporting requirements.

SECTION 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. Wear protective gloves/clothing and eye/face protection. Use only in well-ventilated areas. Do not breathe mist or vapors. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.
SAFETY DATA SHEET

Conditions for safe storage: Store locked up. Store in cool/well ventilated area. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking.

Incompatible materials: Oxidizing agents, mineral acids Amines.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Trimethyl propane triacrylate</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Amorphous Precipitated Silica</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³</td>
<td>N/Av</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>0.025 mg/m³ (respirable)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>2 mg/m³ (respirable fraction)</td>
<td>10 mg/m³ (respirable fraction)</td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures: Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof equipment. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

Skin protection: Wear protective gloves/clothing. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye / face protection: Wear eye/face protection. Wear as appropriate: Tightly fitting safety goggles.

Other protective equipment: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations: Avoid breathing dust, mist or vapors. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, stiff putty

Odour: Characteristic odor.

Odour threshold: No information available.
SAFETY DATA SHEET

pH : No information available.
Melting/Freezing point : No information available.
Initial boiling point and boiling range : >149°C (>300°F)
Flash point : >232°C (>450°F)
Flashpoint (Method) : Cleveland closed cup
Evaporation rate (BuAc = 1) : (butyl acetate = 1) <1
Flammability (solid, gas) : Not applicable.
Lower flammable limit (% by vol.) : Not applicable.
Upper flammable limit (% by vol.) : Not applicable.
Oxidizing properties : None known.
Explosive properties : Not explosive
Vapor pressure : Very low
Vapor density : (Air = 1) > 1
Relative density / Specific gravity : 1.8-2.2
Solubility in water : Insoluble.
Other solubility(ies) : No information available.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution : No information available.
Auto-ignition temperature : No information available.
Decomposition temperature : No information available.
Viscosity : Not available.
Vaporties (% by weight) : Nil
Volatile organic Compounds (VOC’s) : No information available.
Absolute pressure of container : Not applicable.
Flame projection length : Not applicable.
Other physical/chemical comments : No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Hazardous polymerization does not occur.
Conditions to avoid : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
Incompatible materials : Oxidizing agents, mineral acids Amines.
Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
SAFETY DATA SHEET

Routes of entry Ingestion : YES
Routes of exposure skin absorption : YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation : May cause respiratory irritation. Symptoms may include coughing and sneezing.
Sign and symptoms ingestion : Ingestion may cause severe irritation to the mouth, throat and stomach.
Sign and symptoms skin : Direct skin contact may cause temporary redness.
Sign and symptoms eyes : Direct eye contact may cause irritation.

Potential Chronic Health Effects : Chronic skin contact with low concentrations may cause dermatitis.

Mutagenicity : This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Germ Cell Mutagenicity - Category 2 Suspected of causing genetic defects.

Carcinogenicity : This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Carcinogenicity- Category 2 Suspected of causing cancer. Contains Trimethylolpropane triacrylate.
Contains crystalline silica. Crystalline silica is classified as carcinogenic by IARC (Group 1), the ACGIH (Category A2) and the NTP (Group 1 - Known human carcinogen). However, Crystalline silica is listed as causing cancer only when it's particles are airborne and of a respirable size. Airborne respirable particles are not expected for this product, based on the intended use and form of the product as a whole. Contains Titanium dioxide. Titanium dioxide is classified as possibly carcinogenic by IARC (Group 2B). However, the Titanium dioxide used in this product is in a non-respirable form and under normal conditions of use, Titanium dioxide cannot become airborne. The carcinogenic effects of Titanium dioxide are therefore not applicable to this product.

Reproductive effects & Teratogenicity : This product is not expected to cause reproductive or developmental effects.

Sensitization to material : This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Skin sensitization - Category 1 May cause an allergic skin reaction. Not expected to be a respiratory sensitizer.

Specific target organ effects : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Medical conditions aggravated by overexposure : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Synergistic materials : Pre-existing skin, eye, respiratory and central nervous system disorders.

Toxicological data : Contains no ingredients that are considered to have acute toxicity hazards.
### SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr) inh, rat</th>
<th>LD50 (Oral, rat)</th>
<th>LD50 (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>&gt;791 mg/m³ (dust) (no deaths)</td>
<td>11400 mg/kg</td>
<td>&gt;23500 mg/kg</td>
</tr>
<tr>
<td>Trimethylol propane triacrylate</td>
<td>&gt;0.55mg/L (no deaths)</td>
<td>&gt;5000mg/kg</td>
<td>5170mg/kg</td>
</tr>
<tr>
<td>Amorphous Precipitated Silica</td>
<td>&gt;2.08mg/L (no deaths)</td>
<td>3160 mg/kg</td>
<td>&gt;5000mg/kg</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

**Present in white and gray product only**

Titanium dioxide

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr) inh, rat</th>
<th>LD50 (Oral, rat)</th>
<th>LD50 (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>&gt; 6.82 mg/kg (dust) (No mortality)</td>
<td>&gt; 25 000 mg/kg</td>
<td>&gt; 10 000 mg/kg</td>
</tr>
</tbody>
</table>

**Present in white product only**

Zinc oxide

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr) inh, rat</th>
<th>LD50 (Oral, rat)</th>
<th>LD50 (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc oxide</td>
<td>&gt;5700 mg/m³ (&gt;5.7 mg/L)</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt;2000 mg/kg</td>
</tr>
</tbody>
</table>

**Other important toxicological hazards:** None reported by the manufacturer.

### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**: Contains material that may be harmful in the environment.

Do not release, unmonitored, into the environment.

**Ecotoxicity data:**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LC50 / 96h</td>
</tr>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>25068-38-6</td>
<td>3.6 mg/L (Rainbow trout)</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&gt; 100 mg/L (Japanese ricefish)</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>1.1 mg/L (Rainbow trout)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC50 / 48h</td>
</tr>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>25068-38-6</td>
<td>1.1-2.8mg/L (Water flea)</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&gt; 100 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>0.098 mg/L (Water flea)</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC50 / 96h or 72h</td>
</tr>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>25068-38-6</td>
<td>9.4mg/L (Green algae)</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&gt; 100 mg/L/72hr (Green algae)</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>0.044 mg/L/72hr (Green algae)</td>
</tr>
</tbody>
</table>

Persistence and degradability: Not expected to be rapidly biodegradable.

Bioaccumulation potential: No data is available on the product itself.

Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Partition coefficient n-octanol/ater (log Kow)</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin (CAS 25068-38-6)</td>
<td>&gt;2.915</td>
<td>31</td>
</tr>
<tr>
<td>Trimethylol propane triacrylate (CAS 15625-89-5)</td>
<td>N/Av</td>
<td></td>
</tr>
<tr>
<td>Amorphous Precipitated Silica (CAS 112945-52-5)</td>
<td>0.53(calculated)</td>
<td></td>
</tr>
<tr>
<td>Zinc oxide (CAS 1314-13-2)</td>
<td>1.53(estimated)</td>
<td></td>
</tr>
</tbody>
</table>

Mobility in soil: The product itself has not been tested.

Other Adverse Environmental effects: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

Methods of Disposal: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>49CFR/DOT</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT - Additional information</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>

TDG: None. Not regulated.
SAFETY DATA SHEET

TDG Additional information: None.

IMDG Additional information: None. Not regulated. not regulated none

ICAO/IATA Additional information: None. Not regulated. not regulated none

Special precautions for use: Appropriate advice on safety must accompany the package.

Environmental hazards: Contains material that may be harmful in the environment. See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: This information is not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:
Components listed below are present on the following U.S. Federal chemical lists:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</th>
<th>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355: Toxic Chemical</th>
<th>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical de minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>25068-38-6</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
</tr>
<tr>
<td>Trimethylol propane triacrylate</td>
<td>15625-89-5</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
</tr>
<tr>
<td>Amorphous Precipitated Silica</td>
<td>112945-52-5</td>
<td>NL</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>None.</td>
<td>No</td>
<td>N/Av</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

US State Right to Know Laws:
The following chemicals are specifically listed by individual States:
SAFETY DATA SHEET

Ingredients | CAS # | California Proposition 65 | State "Right to Know" Lists
| | | Listed | Type of Toxicity | CA | MA | MN | NJ | PA | RI |
| Bisphenol A / epichlorohydrin resin | 25068-38-6 | No | N/Ap | No | No | No | No | No | No |
| Trimethyl propane triacrylate | 15625-89-5 | No | N/Ap | No | No | Yes | No | No | No |
| Amorphous Precipitated Silica | 112945-52-5 | No | N/Ap | No | No | No | No | No | No |
| Titanium dioxide | 13463-67-7 | Yes | , unbound particles | No | Yes | Yes | Yes | Yes | Yes |
| Crystalline silica | 14808-60-7 | Yes | orne particles of res | No | Yes | Yes | Yes | Yes | Yes |
| Zinc oxide | 1314-13-2 | No | N/Ap | Yes | Yes | Yes | Yes | Yes | Yes |

Canadian Information:
Canadian Environmental Protection Act (CEPA): . All ingredients are present on the DSL.

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this Safety Data Sheet contains all the information required by the CPR.

International Information:
Components listed below are present on the following International Inventory list:

| Ingredients | CAS # | European EINECs | Australia AICS | Philippines PICCS | Japan ENCS | Korea KECI/KECL | China IECSC | NewZealand IOC |
| | | | | | | | | |
| Bisphenol A / epichlorohydrin resin | 25068-38-6 | N/Av | Present | Present | (7)-1283 | KE-24000 | Present | HSR003180 |
| Trimethyl propane triacrylate | 15625-89-5 | 239-701-3 | Present | Present | (2)-1010 | KE-29547 | Present | HSR003398 |
| Amorphous Precipitated Silica | 112945-52-5 | 231-545-4 (as Silicon dioxide) | Present | Present | (1)-548 | KE-30953 | Present | No information available. |
| Titanium dioxide | 13463-67-7 | 236-675-5 | Present | Present | (5)-5225; (1)-558 | KE-33900 | Present | May be used as a single component chemical under an appropriate group standard |
| Crystalline silica | 14808-60-7 | 238-878-4 | Present | Present | (1)-548 | KE-29983 | Present | HSR003125 |
| Zinc oxide | 1314-13-2 | 215-222-5 | Present | Present | (1)-561 | KE-35565 | Present | HSR003104 |

SECTION 16. OTHER INFORMATION

Legend:
ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
ATE: Acute Toxicity Estimate
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
SAFETY DATA SHEET

ECH: European Chemicals Agency
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial Chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HSD: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IBC: Intermediate Bulk Container
IECSC: Inventory of Existing Chemical Substances
IMD: International Maritime Dangerous Goods
IOC: Inventory of Chemicals
IUCLID: International Uniform Chemical Information Database
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/A: Not Applicable
N/Av: Not Available
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet / Material Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References:
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2014.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2015 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - October 2012 version.
6. California Proposition 65 List - December 26, 2014 version

Preparation Date (mm/dd/yyyy): 05/02/2015

Other special considerations for handling: Provide adequate information, instruction and training for operators.
SAFETY DATA SHEET

Prepared for:
Atlas Minerals and Chemicals Inc.
1227 Valley Road
Mertztown, PA 19539
610-682-7171

Prepared by:
ICC The Compliance Center Inc.
Telephone: (888) 442-9628 (U.S.); (888) 977-4834 (Canada)
http://www.thecompliancecenter.com

DISCLAIMER
This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Atlas Minerals and Chemicals Inc. and CCOHS’ Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Atlas Minerals and Chemicals Inc. expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this Safety Data Sheet does not apply to use with any other product or in any other process.

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END OF DOCUMENT
SECTION 1. IDENTIFICATION

Product identifier used on the label:
EPOXYBOND® POOL PUTTY HARDENER

Product Code(s):
Z530105, 530317, 530318

Recommended use of the chemical and restrictions on use:
Epoxy putty hardener
Use pattern: Consumer use
Recommended restrictions: None known.

Chemical family:
Mixture

Name, address, and telephone number of the supplier:
Atlas Minerals and Chemicals Inc.
1227 Valley Road
Mertztown, PA, USA 19539
Supplier's Telephone #:
610-682-7171

24 Hr. Emergency Tel #:
Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical:
Solid, stiff putty. Ammonia odor.

Most important hazards: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Hazard classification:

Acute Toxicity, inhalation - Category 4 (mist)
Eye Damage/Irritation - Category 2A
Skin sensitization - Category 1
Reproductive Toxicity - Category 2

Label elements:

Hazard pictogram(s):

Signal Word:
WARNING!

Hazard statement(s):
SAFETY DATA SHEET

Harmful if inhaled.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility.

Precautionary statement(s)
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust and fume.
Use only outdoors or in a well-ventilated area.
Wash hands thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/clothing and eye/face protection.

IF exposed or concerned: Get medical attention/advice.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
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.

Store locked up.

Dispose of contents/container in accordance with local regulation.

Other hazards
Other hazards which do not result in classification:
Burning produces obnoxious and toxic fumes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause respiratory tract irritation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>Hydrous magnesium silicate; Non-asbestiform talc</td>
<td>14807-96-6</td>
<td>15.0 - 20.0</td>
</tr>
<tr>
<td>Silica</td>
<td>Crystalline quartz</td>
<td>14808-60-7</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>DETA</td>
<td>111-40-0</td>
<td>1.0 - 5.0</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>Epoxy Resin</td>
<td>80-05-7</td>
<td>1.0 - 5.0</td>
</tr>
</tbody>
</table>

The exact concentrations of the above listed chemicals are being withheld as a trade secret.
SAFETY DATA SHEET

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact : IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before re-use.

Eye contact : For eye contact, flush with running water for at least 15 minutes. If eye irritation persists, get medical advice/attention.

Most important symptoms and effects, both acute and delayed

: May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Harmful if inhaled. Symptoms may include coughing, choking and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. May cause an allergic skin reaction. May cause an allergic respiratory reaction (e.g. asthma) in some hypersensitive individuals. Suspected of damaging fertility.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2); Dry chemical; Alcohol-resistant foam; water fog.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

: Not considered flammable.

Flammability classification (OSHA 29 CFR 1910.106)

: Not flammable.

Hazardous combustion products

: Carbon dioxide and carbon monoxide.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures

: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.
SAFETY DATA SHEET

Environmental precautions: Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

Methods and material for containment and cleaning up: Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Sweep up and shovel into suitable containers for disposal. Pick up and transfer to properly labelled containers. Contact the proper local authorities. Refer to Section 13 for disposal of contaminated material.

Special spill response procedures: Contact appropriate local and provincial environmental authorities for assistance and/or reporting requirements.

SECTION 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. Wear suitable protective equipment during handling. Wear protective gloves/clothing and eye/face protection. Use only in well-ventilated areas. Avoid breathing dust and fume. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Contaminated work clothing must not be allowed out of the workplace.

Conditions for safe storage: Store in cool/well ventilated area. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking.

Incompatible materials: Oxidizing agents, mineral acids.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Talc</td>
<td>2 mg/m³ (particulate matter containing no asbestos and &lt;1% crystalline silica, respirable fraction)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Silica</td>
<td>0.025 mg/m³ (respirable fraction)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>1 ppm</td>
<td>N/Av</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures
SAFETY DATA SHEET

: Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof equipment. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection : If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

Skin protection : Wear protective gloves/clothing. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye / face protection : Wear eye/face protection. Wear as appropriate: Tightly fitting safety goggles

Other protective equipment : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations : Avoid breathing dust and fume. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid, stiff putty</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammonia odor.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available.</td>
</tr>
<tr>
<td>pH</td>
<td>No information available.</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>No information available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>232°C (450°F )</td>
</tr>
<tr>
<td>Flash point</td>
<td>254°C (490°F)</td>
</tr>
<tr>
<td>Flashpoint (Method)</td>
<td>Cleveland closed cup</td>
</tr>
<tr>
<td>Evaporation rate (BuAe = 1)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Lower flammable limit (% by vol.)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper flammable limit (% by vol.)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>None known.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Very low</td>
</tr>
<tr>
<td>Vapour density</td>
<td>(Air = 1) &gt; 1</td>
</tr>
<tr>
<td>Relative density / Specific gravity</td>
<td>2.0</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Slightly soluble.</td>
</tr>
<tr>
<td>Other solubility(ies)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water or Coefficient of water/oil distribution</td>
<td>No information available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Volatiles (% by weight)</td>
<td>none</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

Volatile organic Compounds (VOC’s)

: No information available.

Absolute pressure of container

: Not applicable.

Flame projection length

: Not applicable.

Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity

: Not normally reactive.

Chemical stability

: Stable under normal conditions.

Possibility of hazardous reactions

: Hazardous polymerization does not occur.

Conditions to avoid

: Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

Incompatible materials

: Oxidizing agents, mineral acids.

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation

: YES

Routes of entry skin & eye

: YES

Routes of entry Ingestion

: YES

Routes of exposure skin absorption

: YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: May cause respiratory irritation. Symptoms may include coughing and sneezing.

Sign and symptoms Ingestion

: Ingestion may cause severe irritation to the mouth, throat and stomach.

Sign and symptoms skin

: May cause skin irritation. Symptoms may include redness, itching and swelling.

Sign and symptoms eyes

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Eye Damage/Irritation - Category 2A Causes serious eye irritation.

Potential Chronic Health Effects

: May cause damage to the lungs through prolonged or repeated exposure if inhaled.

Mutagenicity

: Not expected to be mutagenic in humans.
SAFETY DATA SHEET

Carcinogenicity: This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Contains crystalline silica. Crystalline silica is classified as carcinogenic by IARC (Group 1), the ACGIH (Category A2) and the NTP (Group 1 - Known human carcinogen). However, Crystalline silica is listed as causing cancer only when it's particles are airborne and of a respirable size. Airborne respirable particles are not expected for this product, based on the intended use and form of the product as a whole.

Reproductive effects & Teratogenicity: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Reproductive Toxicity - Category 2 Suspected of damaging fertility.

Sensitization to material: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Skin sensitization - Category 1 May cause allergic skin reaction. May cause an allergic respiratory reaction (e.g. asthma) in some hypersensitive individuals.

Specific target organ effects: The substance or mixture is not classified as specific target organ toxicant, single exposure. The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Medical conditions aggravated by overexposure: Pre-existing skin, eye, respiratory and central nervous system disorders.

Synergistic materials: No information available.

Toxicological data: The calculated ATE values for this mixture are:
ATE dermal = 27949.24
ATE inhalation (dust/mist) = 3.18
ATE oral = 18516.21
Acute Toxicity, inhalation - Category 4 (mist)

See the following table for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inh, rat</td>
<td>(Oral, rat)</td>
</tr>
<tr>
<td>Talc</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Silica</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>&gt;0.07mg/L</td>
<td>1080 mg/kg</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>&gt;0.113mg/L (no deaths)</td>
<td>3300 mg/kg</td>
</tr>
</tbody>
</table>

Other important toxicological hazards: None reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Contains material that may be harmful in the environment. Do not release, unmonitored, into the environment.
SAFETY DATA SHEET

Ecotoxicity data:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Fish</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LC50 / 96h</td>
<td>NOEC / 21 day</td>
<td>M Factor</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>&gt;100mg/L (Zebra fish)</td>
<td>N/Av</td>
<td>None.</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>0.43mg/L (Guppy)</td>
<td>&gt;10mg/L (Three-spined stickleback)</td>
<td>None.</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>4.6mg/L (Fathead minnow)</td>
<td>N/Av</td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Daphnia</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC50 / 48h</td>
<td>NOEC / 21 day</td>
<td>M Factor</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>N/Av</td>
<td>N/Av</td>
<td>None.</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>2mg/L (Water flea)</td>
<td>5.6mg/L (Water flea)</td>
<td>None.</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>10.2mg/L (Water flea)</td>
<td>&gt;3.146mg/L (Water flea)</td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Algae</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC50 / 96h or 72h</td>
<td>NOEC / 96h or 72h</td>
<td>M Factor</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>N/Av</td>
<td>N/Av</td>
<td>None.</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>187mg/L (Green algae)</td>
<td>10mg/L (Green algae)</td>
<td>None.</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>2.73mg/L (Green algae)</td>
<td>N/Av</td>
<td>None.</td>
</tr>
</tbody>
</table>

Persistence and degradability: No data is available on the product itself.

Bioaccumulation potential: No data is available on the product itself.

Components Partition coefficient n-octanol/aquar (log Kow) Bioconcentration factor (BCF)
--- --- --- ---
Talc (CAS 14807-96-6) no known bioaccumulation
Diethylenetriamine (CAS 111-40-0) -1.58 > 2.8 <= 6.3
Bisphenol A (CAS 80-05-7) 3.4 5.1-13.3

Mobility in soil: The product itself has not been tested.
Other Adverse Environmental effects: None known.

SECTION 13. DISPOSAL CONSIDERATIONS
SAFETY DATA SHEET

Handling for Disposal: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

Methods of Disposal: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>49CFR/DOT</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>TDG Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>IMDG Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Special precautions for user: Appropriate advice on safety must accompany the package.

Environmental hazards: See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: This information is not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:
Components listed below are present on the following U.S. Federal chemical lists:
SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</th>
<th>SARA TITLE II: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:</th>
<th>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical Toxic Chemical</th>
<th>de minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>Yes</td>
<td>N/Av</td>
<td>No</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>Yes</td>
<td>N/Av</td>
<td>Yes</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

**US State Right to Know Laws:**

The following chemicals are specifically listed by individual States:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>California Proposition 65</th>
<th>State &quot;Right to Know&quot; Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Listed</td>
<td>Type of Toxicity</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>No</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>airborne particles of</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>No</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>No</td>
<td>N/Ap</td>
</tr>
</tbody>
</table>

**Canadian Information:**

Canadian Environmental Protection Act (CEPA): . All ingredients are present on the DSL.

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

**International Information:**

Components listed below are present on the following International Inventory list:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>European EINECs</th>
<th>Australia AICS</th>
<th>Philippines PICCS</th>
<th>Japan ENCS</th>
<th>Korea KEIC/KECL</th>
<th>China IECSC</th>
<th>NewZealand IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>238-877-9</td>
<td>Present</td>
<td>Present</td>
<td>(1)-468; (1)-468</td>
<td>KE-32773</td>
<td>Present</td>
<td>No information available.</td>
</tr>
<tr>
<td>Silica</td>
<td>14808-60-7</td>
<td>238-878-4</td>
<td>Present</td>
<td>Present</td>
<td>(1)-548</td>
<td>KE-29983</td>
<td>Present</td>
<td>HSR003125</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>203-865-4</td>
<td>Present</td>
<td>Present</td>
<td>(2)-159</td>
<td>KE-10470</td>
<td>Present</td>
<td>HSR002966</td>
</tr>
<tr>
<td>Bisphenol A</td>
<td>80-05-7</td>
<td>201-245-8</td>
<td>Present</td>
<td>Present</td>
<td>(4)-123</td>
<td>KE-23982</td>
<td>Present</td>
<td>HSR003399</td>
</tr>
</tbody>
</table>

**SECTION 16. OTHER INFORMATION**

**Legend**

- ACGIH: American Conference of Governmental Industrial Hygienists
- AICS: Australian Inventory of Chemical Substances
- ATE: Acute Toxicity Estimate
SAFETY DATA SHEET

CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
ECHA: European Chemicals Agency
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial Chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IBC: Intermediate Bulk Container
IECSC: Inventory of Existing Chemical Substances
IMDG: International Maritime Dangerous Goods
IPL: International Uniform Chemical Information Database
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
L D: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/A: Not Applicable
N/Av: Not Available
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References:
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2014.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2015 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - October 2012 version.
6. California Proposition 65 List - December 26, 2014 version
SAFETY DATA SHEET

Preparation Date (mm/dd/yyyy): 04/26/2015

Other special considerations for handling:
Provide adequate information, instruction and training for operators.

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