



## Section 1: Identification of the Substance/Mixture and of the Company Undertaking

### Product identifier used on the label:

**Product Name:** SMC/FRP Fiberglass Panel Bonding Epoxy

### Other means of identification:

**Product Codes:** 63642504674

### Recommended use of the chemical and restrictions on use:

**Product Uses:** Adhesives  
Industrial chemical

### Chemical manufacturer address and telephone number:

**Manufacturer Name:** Saint-Gobain Abrasives, Inc.

**Manufacturer Address 1:** 1 New Bond Street

**Manufacturer City:** Worcester

**Manufacturer State:** MA

**Manufacturer Zip Code:** 01615

**Manufacturer Country:** USA

**Manufacturer Web:** [www.Nortonabrasives.com](http://www.Nortonabrasives.com)

**Business Phone:** 508-795-5000

**Distributor:** Saint-Gobain Canada, Inc.

**Distributor Address 1:** 28 Albert St, W.

**Distributor City:** Plattsville

**Distributor State:** ON

**Distributor ZipCode:** N0J 1S0

**Distributor Country:** Canada

**Distributor Web:** [www.Nortonabrasives.com](http://www.Nortonabrasives.com)

**Distributor Phone:** 519-684-7441

### Emergency phone number:

**Emergency Phone:** 508-795-5000

**Distributor Emergency Phone:** 508-795-5000

**Creation Date:** 10/12/2010

**Revision Date:** 2018-07-18 15:44:46

**Notes from Section 1:** CHEMTREC:  
For emergencies in the US, call CHEMTREC: 800-424-9300  
For emergencies in Canada, call CHEMTREC: 800-424-9300

NFPA Flammable and Combustible Liquids Classification: Combustible Liquid Class IIIB

## Section 2: Hazards Identification

**Classification of the chemical in accordance with CFR 1910.1200(d)(f):**

<b>Signal Words:</b>	Danger
<b>GHS Class:</b>	Skin corrosion, category 1 Serious Eye Damage, category 1 Skin Sensitization, category 1 Carcinogenicity, category 1A Reproductive toxicity, category 1B
<b>Hazard Statements:</b>	H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H350 - May cause cancer. H360 - May damage fertility or the unborn child.
<b>Precautionary Statements:</b>	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash skin thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 - Immediately call a POISON CENTER or doctor/ physician. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - IF exposed or concerned: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P363 - Wash contaminated clothing before reuse. P405 - Store locked up. P501 - Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified that have been identified during the classification process:****Section 3: Composition/Information on Ingredients****Mixtures:**

Ingredient Name	CAS Number	Ingredient Percent	EC Number	Comments
POLYMER		Concentration: > = 50.00 - < 60.00%		
EPOXY RESIN MODIFIER		Concentration: > = 10.00 - < 15.00%		
ORGANOSILOXANE		Concentration: > = 1.50 - < 5.00%		
SILICA VITREOUS	60676-86-0	Concentration: 16.50%		
CARBON BLACK	1333-86-4	Concentration: 0.40%		
CRISTOBALITE	14464-46-1	Concentration: 0.14%		
AROMATIC AMINE		Concentration: > = 1.50 - < 5.00%		
SILICA VITREOUS	60676-86-0	Concentration: 14.73%		
DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER	4246-51-9	Concentration: 14.13%		
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	90-72-2	Concentration: 7.11%		
METHYLPENTAMETHYLENEDIA MINE	15520-10-2	Concentration: 1.58%		
BIS(DIMETHYLLAMINOETHYL) PHENOL	71074-89-0	Concentration: 1.18%		
CRISTOBALITE	14464-46-1	Concentration: 0.13%		

**CRISTOBALITE:****Comments:**

PART A:  
 Substance/Mixture: Mixture  
 The identity of one or more component(s) is being withheld under business confidentiality.

Classification:  
 Carc. 1A; H350  
 STOT RE 1; H372

**SILICA VITREOUS:****Comments:**

PART A:  
 Substance/Mixture: Mixture  
 The identity of one or more component(s) is being withheld under business confidentiality.

**ORGANOSILOXANE:****Comments:**

PART A:  
 Substance/Mixture: Mixture

CAS-No.: 800986-5522P

**CARBON BLACK:****Comments:**

PART A:  
 Substance/Mixture: Mixture  
 The identity of one or more component(s) is being withheld under business confidentiality.

Classification: Carc. 2; H351

**EPOXY RESIN MODIFIER:****Comments:**

PART A:  
 Substance/Mixture: Mixture

CAS-No.: 800986-5520P

Classification:  
 Skin Irrit. 2; H315  
 Eye Irrit. 2A; H319  
 Skin Sens. 1; H317

**SILICA VITREOUS:****Comments:**

PART B:  
 Substance/Mixture: Mixture  
 The identity of one or more component(s) is being withheld under business confidentiality.

**DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER:****Comments:**

PART B:  
 Substance/Mixture: Mixture  
 The identity of one or more component(s) is being withheld under business confidentiality.

Classification:  
 Skin Corr. 1; H314  
 Eye Dam. 1; H318  
 Skin Sens. 1; H317

**POLYMER:**

**Comments:**

PART A:  
Substance/Mixture: Mixture

CAS-No.: 800986-5211P

Classification: Skin Sens. 1B; H317

**METHYLPENTAMETHYLENEDIA MINE:****Comments:**

PART B:  
Substance/Mixture: Mixture  
The identity of one or more component(s) is being withheld under business confidentiality..

Classification:  
Flam. Liq. 4; H227  
Acute Tox. 4; H302  
Acute Tox. 4; H332  
Acute Tox. 4; H312  
Skin Corr. 1A; H314  
Eye Dam. 1; H318  
STOT SE 3; H335

**AROMATIC AMINE:****Comments:**

PART B:  
Substance/Mixture: Mixture  
CAS-No.: 800986-5525P

Classification:  
Acute Tox. 4; H302  
Skin Corr. 1; H314  
Eye Dam. 1; H318  
Repr. 1B; H360

**2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL:****Comments:**

PART B:  
Substance/Mixture: Mixture  
The identity of one or more component(s) is being withheld under business confidentiality.

Classification:  
Skin Corr. 1; H314  
Eye Dam. 1; H318

**BIS(DIMETHYLLAMINOETHYL) PHENOL:****Comments:**

PART B:  
Substance/Mixture: Mixture  
The identity of one or more component(s) is being withheld under business confidentiality.

Classification:  
Skin Corr. 1; H314  
Eye Dam. 1; H318

**CRISTOBALITE:**

**Comments:****PART B:**

Substance/Mixture: Mixture

The identity of one or more component(s) is being withheld under business confidentiality.

**Classification:**

Carc. 1A; H350

STOT RE 1; H372

**Section 4: First Aid Measures****Description of necessary measures:****Eye Contact:**

In case of eye contact:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses.

Protect unharmed eye.

**Skin Contact:**

In case of skin contact:

Remove contaminated clothing. If irritation develops, get medical attention.

If on skin, rinse well with water.

Wash contaminated clothing before re-use.

**Inhalation:**

If inhaled:

Move to fresh air.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical advice.

If symptoms persist, call a physician.

**Ingestion:**

If swallowed:

Get medical attention immediately.

Do NOT induce vomiting.

Rinse mouth with water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

**Most important symptoms/effects, acute and delayed:****Indication of immediate medical attention and special treatment needed****Note To Physicians:**

No hazards which require special first aid measures.

**Notes from Section 4:****General advice:**

Move out of dangerous area.  
 Consult a physician.  
 Show this safety data sheet to the doctor in attendance.  
 Do not leave the victim unattended.

**Most important symptoms and effects, both acute and delayed:**

This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
 stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways)  
 Drowsiness  
 May cause an allergic skin reaction.  
 Causes serious eye damage.  
 May cause cancer.  
 May damage fertility or the unborn child.  
 Causes severe burns.

**Section 5: Firefighting Measures****Suitable and unsuitable extinguishing media****Extinguishing Media:**

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Water spray  
 Foam  
 Carbon dioxide (CO<sub>2</sub>)  
 Dry chemical

Specific extinguishing methods: Specific extinguishing methods

**Unsuitable Media:**

High volume water jet.

**Specific hazards arising from the chemical****Hazardous Combustion Products:**

Carbon dioxide and carbon monoxide  
 Hydrocarbons  
 Phenols  
 Nitrogen oxides (NO<sub>x</sub>)  
 Ammonia  
 Hydrogen  
 Formaldehyde  
 Acid vapors  
 Carboxylic acids  
 Methanol  
 Silicone polymers  
 Silicon dioxide  
 Carious hydrocarbons  
 Nitrogen oxides (NO<sub>x</sub>)

**Special protective equipment and precautions for fire-fighters****Protective Equipment:**

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

**NFPA Health:**

2

<b>NFPA Fire:</b>	1
<b>NFPA Reactivity:</b>	0
<b>Notes from Section 5:</b>	Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Further information: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

<b>Personnel Precautions:</b>	Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Ensure adequate ventilation. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
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### Methods and materials for containment and cleaning up

<b>Methods for Containment:</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
<b>Methods for Cleanup:</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

### Environmental precautions

<b>Environmental Precautions:</b>	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
<b>Notes from Section 6:</b>	Other information: Comply with all applicable federal, state, and local regulations.

## Section 7: Handling and Storage

### Precautions for safe handling

<b>Handling:</b>	Advice on safe handling: Do not breathe vapours/dust. Do not smoke. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Container hazardous when empty. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations.
<b>Hygiene Practices:</b>	Wash hands before breaks and at the end of workday. When using do not eat or drink. Ensure that eyewash stations and safety showers are close to the workstation location. When using do not smoke.

### Conditions for safe storage, including any incompatibilities

**Storage:**

Conditions for safe storage:  
 Keep container tightly closed in a dry and well-ventilated place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Observe label precautions.  
 Electrical installations/working materials must comply with the technological safety standards.

## Section 8: Exposure Controls/Personal Protection

**Exposure Guidelines****Exposure limit:**

Components with workplace control parameters:

PART A:

Components: SILICA VITREOUS

CAS-No.: 60676-86-0

NIOSH/GUIDE REL: 6 mg/m<sup>3</sup>

Z3 TWA: 0.8 mg/m<sup>3</sup>

TN OEL TWA: 0.1 mg/m<sup>3</sup> Respirable dust.

Z1A TWA: 0.1 mg/m<sup>3</sup> Respirable dust.

US CA OEL TWA PEL: 0.1 mg/m<sup>3</sup> Respirable dust.

TX ESL ST ESL: 27 ìg/m<sup>3</sup> Particulate.

TX ESL AN ESL: 2 ìg/m<sup>3</sup> Particulate.

Components: CARBON BLACK

CAS-No.: 1333-86-4

NIOSH/GUIDE REL: 0.1 mg/m<sup>3</sup>, 3.5 mg/m<sup>3</sup>

OSHA\_TRANS PEL: 3.5 mg/m<sup>3</sup>

ACGIH TWA: 3 mg/m<sup>3</sup> Inhalable fraction.

Components: CRISTOBALITE

CAS-No.: 14464-46-1

ACGIH TWA: 0.025 mg/m<sup>3</sup> Respirable fraction.

Z3 TWA: 0.15 mg/m<sup>3</sup> Total dust.

Z3 TWA: 0.15 mg/m<sup>3</sup> Total dust.

Z1A TWA: 0.05 mg/m<sup>3</sup> Respirable dust.

NIOSH/GUIDE REL: 5 mg/m<sup>3</sup> Fiber, total

NIOSH/GUIDE REL: 5 mg/m<sup>3</sup> fibers, total dust

NIOSH/GUIDE REL: 3 fibre/cm<sup>3</sup> Dust

NIOSH/GUIDE REL: 3 fibre/cm<sup>3</sup> Fiber.

PART B:

Components: SILICA VITREOUS

CAS-No.: 60676-86-0

NIOSH/GUIDE REL: 6 mg/m<sup>3</sup>

Z3 TWA: 0.8 mg/m<sup>3</sup>

TN OEL TWA: 0.1 mg/m<sup>3</sup> Respirable dust.

Z1A TWA: 0.1 mg/m<sup>3</sup> Respirable dust.

US CA OEL TWA PEL: 0.1 mg/m<sup>3</sup> Respirable dust.

TX ESL ST ESL: 27 ìg/m<sup>3</sup> Particulate.

TX ESL AN ESL: 2 ìg/m<sup>3</sup> Particulate.

Components: CRISTOBALITE

CAS-No.: 14464-46-1

ACGIH TWA: 0.025 mg/m<sup>3</sup> Respirable fraction.

Z3 TWA: 0.15 mg/m<sup>3</sup> Total dust.

Z3 TWA: 0.15 mg/m<sup>3</sup> Total dust.

Z1A TWA: 0.05 mg/m<sup>3</sup> Respirable dust.

NIOSH/GUIDE REL: 5 mg/m<sup>3</sup> Fiber, total

NIOSH/GUIDE REL: 5 mg/m<sup>3</sup> fibers, total dust

NIOSH/GUIDE REL: 3 fibre/cm<sup>3</sup> Dust

NIOSH/GUIDE REL: 3 fibre/cm<sup>3</sup> Fiber.



### Appropriate engineering controls

**Engineering Controls:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Individual protection measures

**Eye Protection:** Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.  
Maintain eye wash station in immediate work area.

**Skin Protection:** Wear as appropriate:  
Impervious clothing  
Chemical resistant apron  
Safety shoes  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Discard gloves that show tears, pinholes, or signs of wear.  
Wear resistant gloves (consult your safety equipment supplier).

**Hand Protection:** Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Respiratory Protection:** In the case of vapour formation use a respirator with an approved filter. A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**Other Protective:** Body protection:  
Wear as appropriate:  
Impervious clothing  
Chemical resistant apron  
Safety shoes  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Discard gloves that show tears, pinholes, or signs of wear.  
Wear resistant gloves (consult your safety equipment supplier).

**Hygiene Practices:** Wash hands before breaks and at the end of workday.  
When using do not eat or drink.  
Ensure that eyewash stations and safety showers are close to the workstation location.  
When using do not smoke.

## Section 9: Physical and Chemical Properties

### Physical and chemical properties

**Physical State:** PART A: Liquid  
PART B:

**Color:** PART A: Black  
PART B: Tan

**Odor:** PART A: No data available.  
PART B: Very faint, amine-like.

**pH:** PART A: No data available.  
PART B: No data available.

**Boiling Temperature:** PART A: > 302 deg F/> 150 deg C

<b>Decomposition Temperature:</b>	Thermal decomposition: PART A: No data available. PART B: No data available.
<b>Vapor Pressure:</b>	PART A: < 0.1 hPa (20 deg C) PART B: < 10 hPa (20 deg C)
<b>Vapor Density:</b>	Relative: PART A: No data available. PART B: > 1 (Air = 1.0)
<b>Density:</b>	PART A: 1.089 g/cm <sup>3</sup> (20 deg C) PART B: 1.13 g/cm <sup>3</sup> (20 deg C)  Relative density: PART A: 1.089 (20 deg C) PART B: 1.13 (25 deg C)
<b>Solubility:</b>	Solubility in other solvents: PART A: No data available. PART B: No data available.
<b>Solubility In Water:</b>	PART A: Insoluble PART B: Practically insoluble.
<b>Evaporation Rate:</b>	PART A: No data available. PART B: No data available.
<b>Viscosity:</b>	Viscosity, kinematic: PART A: > 10,000 mm <sup>2</sup> /s (40 deg C) PART B: > 10,000 mm <sup>2</sup> /s (40 deg C)
<b>Odor Threshold:</b>	PART A: No data available. PART B: No data available.
<b>Octanol Water Partition Coef:</b>	PART A: No data available. PART B: No data available.
<b>Dynamic Viscosity:</b>	PART A: No data available. PART B: No data available.
<b>Oxidizing Properties:</b>	PART A: No data available. PART B: No data available.
<b>Note from Section 9:</b>	Appearance: PART A: Viscous PART B: v

## Section 10: Stability and Reactivity

### Reactivity:

**Reactivity:** No decomposition if stored and applied as directed.

### Chemical Stability:

**Chemical Stability:** Stable under recommended storage conditions.

### Possibility of hazardous reactions:

#### Conditions To Avoid:

**Conditions To Avoid:** Excessive heat  
Heat  
Exposure to air.  
Exposure to moisture

### Incompatible Materials:

<b>Incompatible Materials:</b>	None known. Acids Amines Bases Fluorides Oxidizing agents Peroxides Water Peroxides
<b>Hazardous Decomposition Products:</b>	Carbon dioxide and carbon monoxide Formaldehyde-like Hydrocarbons Methanol Nitrogen oxides (NOx) Phenols Silicone polymers Ammonia Nitrogen oxides Silicon dioxide Various hydrocarbons
<b>Notes from Section 10:</b>	Possibility of hazardous reactions: Product will not undergo hazardous polymerization.

## Section 11: Toxicological Information

### Toxicological Information:

**Product:**

**Acute Toxicity:** Not classified based on available information.

**Skin Toxicity:** Components: ALIPHATIC AMINE  
Acute dermal toxicity:  
LD 50 (Rabbit): Estimated > 2,500 mg/kg

LD 50 (Rat): > 2,150 mg/kg  
Method: OECD Test Guideline 402

**Ingestion Toxicity:** Components: ALIPHATIC AMINE  
Acute oral toxicity:  
LD 50 (Rat): ca. 3,160 mg/kg

**Route of Exposure:** Information on likely routes of exposure:  
Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Carcinogenicity:** May cause cancer.

**Mutagenicity:** Germ cell mutagenicity: Not classified based on available information.

**Reproductive Toxicity:** May damage fertility or the unborn child.

**Irritation:** Skin corrosion/irritation:  
 Causes severe burns.  
 Product:  
 Remarks: May cause skin irritation in susceptible persons., Causes severe skin burns and eye damage.

Serious eye damage/eye irritation:  
 Causes serious eye damage.  
 Product:  
 Remarks: May cause irreversible eye damage.

Components: ALIPHATIC AMINE  
 Skin corrosion/irritation:  
 Result: Corrosive to skin.

Serious eye damage/eye irritation:  
 Result: Corrosive to eyes.

Components: Components: EPOXY RESIN CURING AGENT  
 Result: Corrosive to skin.

Serious eye damage/eye irritation:  
 Result: Corrosive to eyes.

**Sensitization:** Respiratory or skin sensitisation:  
 Skin sensitisation: May cause an allergic skin reaction.  
 Respiratory sensitisation: Not classified based on available information.

Components: ALIPHATIC AMINE:  
 Respiratory or skin sensitisation:  
 Assessment: May cause sensitization by skin contact.

**OSHA Carcinogen:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Notes from Section 11:** Further information:  
 Product:  
 Remarks: No data available.

**CARBON BLACK:**

**Skin Toxicity:** Acute dermal toxicity: Acute dermal toxicity

**Ingestion Toxicity:** Acute oral toxicity: LD 50 (Rat): > 10,000 mg/kg

**Carcinogenicity:** Carcinogenicity - Assessment: Limited evidence of carcinogenicity in inhalation studies with animals.

**Irritation:** Skin corrosion/irritation:  
 Result: Not irritating to skin.

Serious eye damage/eye irritation:  
 Result: Corrosive to eyes.

**IARC Carcinogen:** Reasonably anticipated to be a human carcinogen

**EPOXY RESIN MODIFIER:**

**Ingestion Toxicity:** Acute oral toxicity:  
 LD 50 (Rat): 2,169 mg/kg  
 Method: OECD Test Guideline 401

**Irritation:** Skin corrosion/irritation:  
Result: Irritating to skin.

Serious eye damage/eye irritation:  
Result: Irritating to eyes.

**Sensitization:** Respiratory or skin sensitisation:  
Result: May cause sensitization by skin contact.

**CRISTOBALITE:**

**Carcinogenicity:** Carcinogenicity - Assessment: Human carcinogen.

**Irritation:** Skin corrosion/irritation:  
Result: Possibly irritating to skin.

Serious eye damage/eye irritation:  
Result: Possibly irritating to eyes.

**IARC Carcinogen:** Group 1: Carcinogenic to humans.

**NTP Carcinogen:** Known to be human carcinogen.

**Notes from Section 11:** Further information:  
Remarks: Lung

**POLYMER:**

**Skin Toxicity:** LD 50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment:  
Not classified as acutely toxic by dermal absorption under GHS.

**Ingestion Toxicity:** Acute oral toxicity:  
LD 50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 420  
Assessment: No adverse effect has been observed in acute oral toxicity tests.

**Mutagenicity:** Germ cell mutagenicity:  
Genotoxicity in vitro:  
Test Type: In vitro assay  
Test species: Rodent cell line  
Metabolic activation: Without metabolic activation  
Result: Positive

Test Type: In vitro assay  
Test species: Rodent cell line  
Metabolic activation: With metabolic activation  
Result: Negative

Test Type: Ames test  
Metabolic activation: With and without metabolic activation  
Result: Negative

Genotoxicity in vivo:  
Test Type: In vivo assay  
Test species: Mouse (male)  
Application Route: Ingestion  
Result: Negative

**Irritation:** Skin corrosion/irritation:  
Result: Slightly irritating to skin.

Serious eye damage/eye irritation:

**Sensitization:** Respiratory or skin sensitisation:  
 Test Type: Local lymph node assay  
 Method: OECD Test Guideline 429  
 Result: The product is a skin sensitiser, sub-category 1B.

**METHYLPENTAMETHYLENEDIA MINE:**

**Skin Toxicity:** Acute dermal toxicity:  
 LD50 (Rat, male and female): 1,870 mg/kg  
 Method: OECD Test Guideline 402  
 GLP: No  
 Remarks: Information given is based on data obtained from similar substances.

**Ingestion Toxicity:** Acute oral toxicity:  
 LD50 (Rat, male): 1,690 mg/kgV Method: OECD Test Guideline 401  
 GLP: No

**Inhalation Toxicity:** Acute inhalation toxicity:  
 LC50 (Rat, male and female): 4.9 mg/l  
 Exposure time: 1 h  
 Test atmosphere: Dust/mist  
 Method: OECD Test Guideline 403  
 GLP: Yes

**Mutagenicity:** Germ cell mutagenicity:  
 Genotoxicity in vitro:  
 Genotoxicity in vitro:  
 Test Type: Chromosome aberration test in vitro  
 Test species: Human lymphocytes  
 Metabolic activation: With and without metabolic activation  
 Method: OECD Test Guideline 473 (In vitro Mammalian Chromosome Aberration Test)  
 Result: Negative  
 GLP: Yes

Test species: Mouse lymphoma cells  
 Metabolic activation: With and without metabolic activation  
 Method: OECD Test Guideline 476  
 Result: Negative  
 GLP: Yes

Genotoxicity in vivo:  
 Test Type: In vivo micronucleus test  
 Test species: Mouse (male and female)  
 Application Route: Inhalation (dust/mist/fume)  
 Method: OECD Test Guideline 474  
 Result: Negative  
 GLP: Yes  
 Remarks: Information given is based on data obtained from similar substances.

**Irritation:** Skin corrosion/irritation:  
 Species: Rabbit  
 Method: OECD Test Guideline 404  
 Result: Corrosive after 3 minutes or less of exposure.

Serious eye damage/eye irritation:  
 Species: Rabbit  
 Result: Corrosive to eyes.

**Sensitization:** Respiratory or skin sensitisation:  
 Species: Guinea pig  
 Assessment: Did not cause sensitisation on laboratory animals.

**AROMATIC AMINE:**

Ingestion Toxicity:	Acute oral toxicity: LD 50 (Rat): ca. 970 mg/kg
Mutagenicity:	<p>Germ cell mutagenicity:  Genotoxicity in vitro:  Test Type: Unscheduled DNA synthesis assay  Test species: Rat hepatocytes  Method: OECD Test Guideline 482  Result: Negative</p> <p>Test Type: Ames test  Test species: Salmonella typhimurium  Metabolic activation: With and without metabolic activation  Method: OECD Test Guideline 471  Result: Negative  GLP: Yes</p> <p>Test Type: In vitro mammalian cell gene mutation test  Test species: Chinese hamster lung cells  Metabolic activation: With and without metabolic activation  Method: OECD Test Guideline 476  Result: Negative  GLP: Yes</p> <p>Genotoxicity in vivo:  Test Type: Micronucleus test  Test species: Mouse  Method: OECD Test Guideline 474  Result: Negative  GLP: Yes</p>
Reproductive Toxicity:	Reproductive toxicity - Assessment: Clear evidence of adverse effects on development, based on animal experiments.
Irritation:	<p>Skin corrosion/irritation:  Species: Rabbit.  Result: Corrosive to skin.</p> <p>Serious eye damage/eye irritation:  Species: Rabbit  Result: Corrosive to eyes</p>

**BIS(DIMETHYLLAMINOETHYL) PHENOL:**

Irritation:	<p>Skin corrosion/irritation:  Result: Corrosive to skin.</p> <p>Serious eye damage/eye irritation:  Result: Corrosive to eyes.</p>
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**SILICA VITREOUS:**

Irritation:	<p>Skin corrosion/irritation:  Result: Possibly irritating to skin.</p> <p>Serious eye damage/eye irritation:  Result: Possibly irritating to eyes.</p>
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Notes from Section 11:	<p>Further information:  Remarks: Lung</p>
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**ORGANOSILOXANE:**

<b>Skin Toxicity:</b>	Acute dermal toxicity: LD 50 (Rabbit): 4,250 mg/kg
<b>Ingestion Toxicity:</b>	Acute oral toxicity: LD 50 (Rat): 8,025 mg/kg Method: OECD Test Guideline 401
<b>Inhalation Toxicity:</b>	Acute inhalation toxicity: LC 50 (Rat): > 5.3 mg/l Exposure time: 4 h Test atmosphere: Dust/mist Method: OECD Test Guideline 403
<b>Mutagenicity:</b>	Germ cell mutagenicity: Genotoxicity in vitro: Test Type: Ames test Test species: Salmonella typhimurium Metabolic activation: With and without metabolic activation Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay) Result: Positive  Test species: Mouse lymphoma cells Metabolic activation: With and without metabolic activation Method: OECD Test Guideline 476 Result: Positive  Test species: Chinese hamster ovary cells Method: OECD Test Guideline 479 Result: Positive  Genotoxicity in vivo: Test Type: In vivo micronucleus test Test species: Mouse (male and female) Cell type: Bone marrow Application Route: Intraperitoneal Method: OECD Test Guideline 474 Result: Positive
<b>Irritation:</b>	Skin corrosion/irritation: Result: Slightly irritating to skin.  Serious eye damage/eye irritation: Result: Irreversible effects on the eye.
<b>Sensitization:</b>	Respiratory or skin sensitisation: Species: Guinea pig Assessment: Did not cause sensitisation on laboratory animals.
<b>CRISTOBALITE:</b>	
<b>NTP Carcinogen:</b>	Reasonably anticipated to be a human carcinogen.

## Section 12: Ecological Information

### Ecotoxicity:

#### Product:



**Ecotoxicity:**

Components: ALIPHATIC AMINE

Toxicity to fish:

LD 50 (Leuciscus idus (Golden orfe)): > 1,000 mg/l

Exposure time: 96 h

Test Type: Static test

Test substance: Neutralised product

Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates:

EC 50 (Water flea (Daphnia magna)): 218.16 mg/l

Exposure time: 48 h

Test Type: Static test

Method: Directive 67/548/EEC, Annex V, C.2.

Components: EPOXY RESIN CURING AGENT

Toxicity to fish:

LC 50 (Oncorhynchus mykiss (rainbow trout)): > 180 - < 240 mg/l

Exposure time: 96 h

Test Type: Static test

Toxicity to algae:

EC 50 (Desmodesmus subspicatus (green algae)): 84 mg/l

End point: Growth inhibition

Exposure time: 72 h

**EPOXY RESIN MODIFIER:****Ecotoxicity:**

Ecotoxicology Assessment Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

**POLYMER:****Ecotoxicity:**

Toxicity to fish:

LC50 (Oncorhynchus mykiss (rainbow trout)): 2.7 mg/l

Exposure time: 96 h

Test Type: Semi-static test

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Water flea (Daphnia magna)): 2.8 mg/l

Exposure time: 48 h

Test Type: Static test

Method: OECD Test Guideline 202

Toxicity to algae:

EC50 (Pseudokirchneriella subcapitata (green algae)): 4.2 mg/l

Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC (Water flea (Daphnia magna)): 0.3 mg/l

Exposure time: 21 d

Test Type: Semi-static test

Method: OECD Test Guideline 211

**METHYLPENTAMETHYLENEDIA MINE:**

**Ecotoxicity:**

Toxicity to fish:  
 LC50 (Leuciscus idus (Golden orfe)): 130 mg/l  
 Exposure time: 48 h  
 Test Type: Static test  
 Method: OECD Test Guideline 203  
 GLP: Yes

Toxicity to daphnia and other aquatic invertebrates:  
 EC50 (Daphnia magna (Water flea)): 50 mg/l  
 Exposure time: 48 h  
 Test Type: Static test  
 Method: EPA-660/3-75-009  
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae:  
 EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
 Exposure time: 72 h  
 Test Type: Static test  
 Method: OECD Test Guideline 201  
 Remarks: Information given is based on data obtained from similar substances.

NOEC (Pseudokirchneriella subcapitata (green algae)): 10 mg/l  
 Exposure time: 72 h  
 Test Type: Static test  
 Method: OECD Test Guideline 201  
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):  
 NOEC (Daphnia magna (Water flea)): 4.16 mg/l  
 Exposure time: 21 d  
 End point: Reproduction Test  
 Test Type: Semi-static test  
 Method: OECD Test Guideline 211  
 GLP: Yes  
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to bacteria:  
 EC20 (Pseudomonas putida): 30 mg/l  
 End point: Growth rate  
 Exposure time: 18 h  
 Test Type: Static

**AROMATIC AMINE:**

**Ecotoxicity:**

Toxicity to fish:  
 LC50 (Leuciscus idus (Golden orfe)): 283.6 mg/l  
 Exposure time: 48 h  
 Test Type: Static test

Toxicity to daphnia and other aquatic invertebrates:  
 EC50 (Daphnia magna (Water flea)): 341.5 mg/l  
 Exposure time: 48 h  
 Test Type: Static test  
 Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae:  
 EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 133 mg/l  
 End point: Growth inhibition  
 Exposure time: 72 h  
 Test Type: Static test  
 Method: DIN 38412  
 GLP: No

**ORGANOSILOXANE:****Ecotoxicity:**

Toxicity to fish:  
 LC50 (Cyprinus carpio (Carp)): 55 mg/l  
 Exposure time: 96 h  
 Test Type: Semi-static test

Toxicity to daphnia and other aquatic invertebrates:  
 EC50 (Daphnia (water flea)): 324 mg/l  
 Exposure time: 48 h  
 Test Type: Static test

Toxicity to algae:  
 EC50 (Pseudokirchneriella subcapitata (microalgae)): 350 mg/l  
 Exposure time: 96 h  
 Test Type: Static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):  
 NOEC (Daphnia (water flea)): 100 mg/l  
 Exposure time: 21 d

**Persistence and degradability:****Product:****Biodegradation:**

Persistence and degradability:  
 Biodegradability:  
 Components: ALIPHATIC AMINE  
 Result: Not readily biodegradable.  
 Biodegradation: < 10 %  
 Exposure time: 60 d  
 Method: OECD Test Guideline 301B

Components: EPOXY RESIN CURING AGENT  
 Result: Not readily biodegradable.  
 Biodegradation: 4 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301D

**POLYMER:**

**Biodegradation:**

Persistence and degradability:  
Biodegradability:  
Result: Not readily biodegradable.  
Biodegradation: 5 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

Biodegradation: 82 %  
Exposure time: 28 d  
Method: Abiotic degradation

Physico-chemical removability:  
Remarks: The product can be degraded by abiotic (e.g. chemical or photolytic) processes.

**METHYLPENTAMETHYLENEDIA MINE:**

**Biodegradation:**

Persistence and degradability:  
Biodegradability:  
Result: Readily biodegradable  
Biodegradation: 100 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D  
GLP: Yes

**AROMATIC AMINE:**

**Biodegradation:**

Persistence and degradability:  
Biodegradability:  
Inoculum: Activated sludge  
Result: Readily biodegradable  
Exposure time: 18 d  
Method: OECD Test Guideline 301A  
GLP: Yes

**ORGANOSILOXANE:**

**Biodegradation:**

Persistence and degradability:  
Biodegradability:  
Aerobic  
Result: Not readily biodegradable.  
Biodegradation: 37 %  
Exposure time: 28 d  
GLP: Yes

**METHYLPENTAMETHYLENEDIA MINE:**

**BioAccumulation:**

Bioaccumulative potential:  
Partition coefficient: n-octanol/water  
log Pow: <= 1 (25 deg C)  
pH: 9  
GLP: Yes

**AROMATIC AMINE:**

**BioAccumulation:**

Bioaccumulative potential:  
Partition coefficient: n-octanol/water  
log Pow: -0.02 (25 deg C)  
Method: OECD Test Guideline 107

**ORGANOSILOXANE:**

**BioAccumulation:**

c log Pow: Estimated 0.5 (20 deg C)

**Mobility in soil:**

**Product:**

**Notes from Section 12:**

Mobility in soil:  
Components: No data available.

Other adverse effects: No data available.

**Product:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

## Section 13: Disposal Considerations

**Description of waste:****Waste Disposal:****General advice:**

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

**Contaminated Packaging:**

Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Do not re-use empty containers.

## Section 14: Transport Information

**DOT Other:****U.S. DOT - ROAD:**

ID NUMBER: UN 3267

PROPER SHIPPING NAME: Corrosive liquid, basic, organic, n.o.s. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

**U.S. DOT - RAIL:**

ID NUMBER: UN 3267

PROPER SHIPPING NAME: Corrosive liquid, basic, organic, n.o.s. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

**U.S. DOT - INLAND WATERWAYS:**

ID NUMBER: UN 3267

PROPER SHIPPING NAME: Corrosive liquid, basic, organic, n.o.s. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

**IMDG Shipping Name:**

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

**IMDG UN Number:**

UN 3267

**IMDG Hazard Class:**

8

**IMDG Packing Group:**

III

**IMDG Other:**

MARINE POLLUTANT: (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

**IATA Other:**

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:

ID NUMBER: UN 3267

PROPER SHIPPING NAME: Corrosive liquid, basic, organic, n.o.s. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:

ID NUMBER: UN 3267

PROPER SHIPPING NAME: Corrosive liquid, basic, organic, n.o.s. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

**Canada Other:**

TRANSPORT CANADA - ROAD:

ID NUMBER: UN 3267

PROPER SHIPPING NAME: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

TRANSPORT CANADA - RAIL:

ID NUMBER: UN 3267

PROPER SHIPPING NAME: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

TRANSPORT CANADA - INLAND WATERWAYS:

ID NUMBER: UN 3267

PROPER SHIPPING NAME: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

**Notes from Section 14:**

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES:

ID NUMBER: UN 3267

PROPER SHIPPING NAME: LIQUIDO CORROSIVO, BASICO, ORGANICO, N.E.P. (2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, ALIPHATIC AMINE)

\*HAZARD CLASS: 8

PACKING GROUP: III

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant: Yes

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

## Section 15: Regulatory Information

### Safety, health and environmental regulations specific for the product:

#### Regulatory - Product Based:

##### SARA 311/312 Hazards:

Acute Health Hazard  
Chronic Health Hazard

SARA 313 Component(s) SARA 313:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65:

WARNING! This product contains a chemical known to the State of California to cause cancer.

Components: CARBON BLACK

CAS: 1333-86-4

Components: CRISTOBALITE

CAS: 14464-46-1

Components: EPICHLOROHYDRIN

CAS: 106-89-8

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Components: METHANOL

CAS: 67-56-1

Components: EPICHLOROHYDRIN

CAS: 106-89-8

SARA 311/312 Hazards:

PART B:  
Acute Health Hazard  
Chronic Health Hazard

SARA 313 Component(s) SARA 313:

PART B: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65:

PART B:  
WARNING! This product contains a chemical known to the State of California to cause cancer.

Components: CRISTOBALITE

CAS: 14464-46-1

TSCA:

On TSCA Inventory.

DSL:

This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.

AUSTR:

On the inventory, or in compliance with the inventory.

ENCS:

Exempt.

KECL:

Not in compliance with the inventory.

PICCS:

On the inventory, or in compliance with the inventory.

**IECSC:**

On the inventory, or in compliance with the inventory.

**Inventories:**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Registration: Trade Secret

Chemical Name: POLYMER

Identification number: 800986-5211P

Chemical Name: ALIPHATIC AMINE

Identification number: 254504001-5601

Chemical Name: EPOXY RESIN MODIFIER

Identification number: 800986-5520P

Chemical Name: EPOXY RESIN CURING AGENT

Identification number: 800986-5577P

Chemical Name: AROMATIC AMINE

Identification number: 800986-5525P

Chemical Name: ORGANOSILOXANE

Identification number: 800986-5522P

## Section 16: Additional Information

**Creation Date:** 10/12/2010  
**Revision Date:** 2018-07-18 15:44:46  
**Author:** Enviance

**HMIS:**

<b>Health</b>	<b>2*</b>
<b>Flammability</b>	<b>1</b>
<b>Reactivity</b>	<b>0</b>
<b>PPE</b>	

Chronic Health Hazard

**NFPA:****Other Information:**

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