



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

### Product identifier used on the label:

**Product Name:** Epoxy Panel Bonder 90 Minute

### Other means of identification:

**Product Codes:** 63642506421

### 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:** 04/25/2011

**Revision Date:** 2018-07-18 15:24:33

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

## Section 2: Hazards Identification

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



**Signal Words:** Danger

**Product:**

**GHS Class:** GHS Classification:  
 Skin corrosion: Category 1  
 Serious eye damage: Category 1  
 Skin sensitization: Category 1  
 Carcinogenicity: Category 1A  
 Reproductive toxicity: Category 1B

**Hazard Statements:** 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 .

**Precautionary Statements:** 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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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. Immediately call a POISON CENTER or doctor/physician.  
 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 (PART A)	800986-5211P	> = 50.00 - < 60.00%		
EPOXY RESIN MODIFIER (PART A)	800986-5520P	> = 10.00 - < 15.00%		
ORGANOSILOXANE (PART A)	800986-5522P	> = 1.50 - < 5.00%		
SILICA VITREOUS (PART A)	60676-86-0	16.50%		
CARBON BLACK (PART A)	1333-86-4	0.40%		
CRISTOBALITE (PART A)	14464-46-1	0.14%		
AROMATIC AMINE (PART B)	800986-5525P	> = 1.50 - < 5.00%		
SILICA VITREOUS (PART B)	60676-86-0	14.73%		
DIETHYLENE GLYCOL DI(AMINOPROPYL)ETHER (PART B)	4246-51-9	14.13%		
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (PART B)	90-72-2	7.11%		
METHYLPENTAMETHYLENEDIAMINE (PART B)	15520-10-2	1.58%		
BIS(DIMETHYLLAMINOETHYL)PHENOL (PART B)	71074-89-0	1.18%		

CRISTOBALITE (PART B)	14464-46-1	0.13%		
-----------------------	------------	-------	--	--

**Product:**

**Notes:** Other hazards: None known.

## Section 4: First Aid Measures

**Description of necessary measures:**

**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:** Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
Wash contaminated clothing before re-use.

**Inhalation:** 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:**

**Other First Aid:** 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.

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

**Note To Physicians:** No hazards which require special first aid measures.

**Notes from Section 4:** 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

<b>Extinguishing Media:</b>	<p>Suitable: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO<sub>2</sub>) Dry chemical</p>
<b>Unsuitable Media:</b>	High volume water jet

### Specific hazards arising from the chemical

<b>Hazardous Combustion Byproducts:</b>	<p>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 various hydrocarbons nitrogen oxides (NO<sub>x</sub>)</p>
---	---

### Special protective equipment and precautions for fire-fighters

<b>Protective Equipment:</b>	Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.
<b>Notes from Section 5:</b>	<p>Specific extinguishing methods: Product is compatible with standard fire-fighting agents.</p> <p>Further information: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.</p>

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

<b>Personnel Precautions:</b>	<p>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.</p>
-------------------------------	---

### Methods and materials for containment and cleaning up

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

### 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

<b>Storage:</b>	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 µg/m<sup>3</sup> Particulate.

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

TX ESL AN ESL: 2 µg/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: 0.05 mg/m<sup>3</sup> Respirable.

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.

<b>Skin Protection:</b>	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).
<b>Hand Protection:</b>	Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
<b>Respiratory Protection:</b>	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.
<b>Other Protective:</b>	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).
<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.

## Section 9: Physical and Chemical Properties

### Physical and chemical properties

<b>Physical State:</b>	PART A: Liquid PART B: Liquid
	Appearance: PART A: Viscous PART B: Viscous
<b>Color:</b>	PART A: Black PART B: Tan
<b>Odor:</b>	PART A: No data available PART B: Very faint, amine-like
<b>pH:</b>	PART A: No data available PART B: No data available
<b>Boiling Temperature:</b>	PART A: > 302 deg F/> 150 deg C
<b>Flash Point:</b>	PART A: > 210 deg F/> 99 deg C PART B: > 200.1 deg F/> 93.4 deg C
<b>Flash Point Method:</b>	PART A: Seta closed cup PART B: Seta closed cup

<b>Lower Flammable Limit:</b>	PART A: No data available PART B: No data available
<b>Upper Flammable Limit:</b>	PART A: No data available PART B: No data available
<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: 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>	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

## 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:

**Hazardous Polymerization:** Possibility of hazardous reactions: Product will not undergo hazardous polymerization.

### 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>Possible 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

## Section 11: Toxicological Information

**Toxicological Information:****Product:**

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

**Skin Toxicity:** 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:** 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.

**AROMATIC AMINE:**

Genotoxicity in vitro:

Test Type: unscheduled DNA synthesis assay

Test species: rat hepatocytes

Method: OECD Test Guideline 482

Result: negative

Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: yes

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

Genotoxicity in vivo:

Test Type: Micronucleus test

Test species: Mouse

Method: OECD Test Guideline 474

Result: negative

GLP: yes

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

**AROMATIC AMINE:**

Reproductive toxicity - Assessment: Clear evidence of adverse effects on development, based on animal experiments.

**Irritation:** Skin corrosion/irritation: Causes severe burns. Product: Remarks: May cause skin irritation in susceptible persons., Causes severe skin burns and eye damage. ALIPHATIC AMINE: Result: Corrosive to skin EPOXY RESIN CURING AGENT: Result: Corrosive to skin Serious eye damage/eye irritation: Causes serious eye damage. Product: Remarks: May cause irreversible eye damage. ALIPHATIC AMINE: Result: Corrosive to eyes EPOXY RESIN CURING AGENT: 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.

**ALIPHATIC AMINE:**

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.

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

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

**POLYMER (PART A):**

**Skin Toxicity:**

Acute dermal toxicity:

LD 50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: Not classified as acutely toxic by dermal absorption under GHS.

<b>Ingestion Toxicity:</b>	<p>Acute oral toxicity:  LD 50 (Rat): &gt; 2,000 mg/kg  Method: OECD Test Guideline 420  Assessment: No adverse effect has been observed in acute oral toxicity tests.</p>
<b>Mutagenicity:</b>	<p>Germ cell mutagenicity:  Genotoxicity in vitro:  Test Type: in vitro assay  Test species: Rodent cell line  Metabolic activation: without metabolic activation  Result: positive</p> <p>Test Type: in vitro assay  Test species: Rodent cell line  Metabolic activation: with metabolic activation  Result: negative</p> <p>Test Type: Ames test  Metabolic activation: with and without metabolic activation  Result: negative</p> <p>Genotoxicity in vivo:  Test Type: in vivo assay  Test species: Mouse (male)  Application Route: Ingestion  Result: negative</p>
<b>Irritation:</b>	<p>Skin corrosion/irritation:  Result: Slightly irritating to skin</p> <p>Serious eye damage/eye irritation:  Result: Slightly irritating to eyes</p>
<b>Sensitization:</b>	<p>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.</p>

**METHYLPENTAMETHYLENEDIAMINE (PART B):**

<b>Skin Toxicity:</b>	<p>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.</p>
<b>Ingestion Toxicity:</b>	<p>Acute oral toxicity:  LD50 (Rat, male): 1,690 mg/kg  Method: OECD Test Guideline 401  GLP: no</p>
<b>Inhalation Toxicity:</b>	<p>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</p>

**Mutagenicity:**

Germ cell mutagenicity:  
 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 (PART B):****Ingestion Toxicity:**

Acute oral toxicity:  
 LD 50 (Rat): ca. 970 mg/kg

**Irritation:**

Skin corrosion/irritation:  
 Species: Rabbit  
 Result: Corrosive to skin

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

**BIS(DIMETHYLLAMINOETHYL)PHENOL (PART B):****Irritation:**

Skin corrosion/irritation:  
 Result: Corrosive to skin

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

**CRISTOBALITE (PART A):****Carcinogenicity:**

Carcinogenicity - Assessment: Human carcinogen.

<b>Irritation:</b>	<p>Skin corrosion/irritation: Result: Possibly irritating to skin</p> <p>Serious eye damage/eye irritation: Result: Possibly irritating to eyes</p>
<b>IARC Carcinogen:</b>	Group 2B: Possibly carcinogenic to humans
<b>NTP Carcinogen:</b>	Reasonably anticipated to be a human carcinogen
<b>CARBON BLACK (PART A):</b>	
<b>Skin Toxicity:</b>	Acute dermal toxicity: LD 50 (Rabbit): > 3 g/kg
<b>Ingestion Toxicity:</b>	Acute oral toxicity: LD 50 (Rat): > 10,000 mg/kg
<b>Carcinogenicity:</b>	Carcinogenicity - Assessment: Limited evidence of carcinogenicity in inhalation studies with animals.
<b>Irritation:</b>	<p>Skin corrosion/irritation: Result: Not irritating to skin</p> <p>Serious eye damage/eye irritation: Result: Slightly irritating to eyes</p>
<b>IARC Carcinogen:</b>	Yes
<b>SILICA VITREOUS (PART B):</b>	
<b>Irritation:</b>	Serious eye damage/eye irritation: Result: Possibly irritating to eyes
<b>ORGANOSILOXANE (PART A):</b>	
<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

**Mutagenicity:**

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

**Irritation:**

Skin corrosion/irritation:  
Result: Slightly irritating to skin

Serious eye damage/eye irritation:  
Result: Irreversible effects on the eye

**Sensitization:**

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

**EPOXY RESIN MODIFIER (PART A):**

**Ingestion Toxicity:**

EPOXY RESIN CURING AGENT:  
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.

**SILICA VITREOUS (PART A):**

**Irritation:**

Skin corrosion/irritation:  
Result: Possibly irritating to skin

**Section 12: Ecological Information**

**Ecotoxicity:**

**Product:**

**Effect of Material On Aquatic:****ALIPHATIC AMINE:**

Toxicity to fish:

LD 50 (Leuciscus idus (Golden orfe)): &gt; 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.

**EPOXY RESIN CURING AGENT:**

Toxicity to fish:

LC 50 (Oncorhynchus mykiss (rainbow trout)): &gt; 180 - &lt; 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

**POLYMER (PART A):****Effect of Material On Aquatic:**

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

**METHYLPENTAMETHYLENEDIAMINE (PART B):**

**Effect of Material On Aquatic:**

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 (PART B):**



**Effect of Material On Aquatic:**

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

**EPOXY RESIN MODIFIER (PART A):****Effect of Material On Aquatic:**

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

**ORGANOSILOXANE (PART A):****Effect of Material On Aquatic:**

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

**POLYMER (PART A):**

**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.

**METHYLPENTAMETHYLENEDIAMINE (PART B):****Biodegradation:**

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

**AROMATIC AMINE (PART B):****Biodegradation:**

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

**EPOXY RESIN MODIFIER (PART A):****Biodegradation:**

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

**ORGANOSILOXANE (PART A):****Biodegradation:**

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

**Bioaccumulative potential:****Product:****BioAccumulation:**

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

**METHYLPENTAMETHYLENEDIAMINE (PART B):**

**BioAccumulation:**

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

**ORGANOSILOXANE (PART A):**

**BioAccumulation:**

Bioaccumulative potential:  
Partition coefficient: n-octanol/water: log Pow: Estimated 0.5 (20 deg C)

**Mobility in soil:**

**Product:**

**Mobility In Environmental Media:**

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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

**IMDG:** INTERNATIONAL MARITIME DANGEROUS GOODS:  
**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/LTD. QTY.:  
 MARINE POLLUTANT: (BISPHENOL A-EPICHLOROHYDRIN POLYMER)LIMITED QUANTITY

**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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

**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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

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  
 MARINE POLLUTANT/LTD. QTY.: LIMITED QUANTITY

**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:

##### Notes 1:

PART A:

##### Section 312 Hazard Category:

SARA 311/312 Hazards:  
 Acute Health Hazard  
 Chronic Health Hazard

##### Section 313 Toxic Release Form:

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.

**State:**

California Prop 65:  
 WARNING! This product contains a chemical known to the State of California to cause cancer.  
 CARBON BLACK; 1333-86-4  
 CRISTOBALITE; 14464-46-1  
 EPICHLOROHYDRIN; 106-89-8

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.  
 METHANOL; 67-56-1  
 EPICHLOROHYDRIN; 106-89-8

**Notes 1:**

PART B:

**Section 312 Hazard Category:**

SARA 311/312 Hazards:  
 Acute Health Hazard  
 Chronic Health Hazard

**Section 313 Toxic Release Form:**

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.

**State:**

California Prop 65:  
 WARNING! This product contains a chemical known to the State of California to cause cancer.  
 CRISTOBALITE; 14464-46-1

**TSCA 8(b): Inventory Status:**

On TSCA Inventory

**Canada NDSL:**

This product contains the following components listed on the Canadian NDSL.

**Canada DSL:**

All other components are on the Canadian DSL.

**Australia Chemical Inventory****Status:**

AUSTR: On the inventory, or in compliance with the inventory

**Japan Chemical Inventory Status:**

ENCS: Exempt

**Korean Chemical Inventory Status:**

KECL: Not in compliance with the inventory

**Philippines Chemical Inventory****Status:**

PICCS: On the inventory, or in compliance with the inventory

**International Chemical Inventory****Lists:**

IECSC: On the inventory, or in compliance with the inventory

**Regulatory Paragraph:**

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:** 04/25/2011  
**Revision Date:** 2018-07-18 15:24:33  
**Author:** Enviance

**Other Information:**

Copyright © 1996-2018 Enviance Inc. All Rights Reserved.