# **Safety Data Sheet**



Issue Date: 21-May-2013 Revision Date: 25-Oct-2017 Version 1

### 1. IDENTIFICATION

Product Identifier

Product Name PC CONCRETE EPOXY, PART A

Other means of identification

**SDS #** 130521-37B-CA

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesives

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier IdentifierManufacturer AddressTHIS SAFETY DATA SHEETProtective Coatings Co.IS NOT COMPLIANT UNLESS221 S Third St.

CANADIAN ADDRESS IS USED

Allentown, PA 18102 USA 610-432-3543 / 800-220-2103

**Emergency Telephone Number** 

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

AppearanceWhite pastePhysical statePasteOdorSlight

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

### **Label Elements**

### Signal word Warning

#### **Hazard statements**

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause damage to organs through prolonged or repeated exposure



### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Contaminated work clothing should not be allowed out of the workplace Do not breathe dust/fume/gas/mist/vapors/spray

# **Precautionary Statements - Response**

Get medical advice/attention 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

IF ON SKIN: Wash with plenty of water and soap

Take off contaminated clothing and wash it before reuse

If skin irritation or rash occurs: Get medical advice/attention

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture

Chemical Name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
			(HIVIIRA registry #)	
Diglycidyl Ether of Bisphenol A	25085-99-8	60	-	-
Silica, Quartz	14808-60-7	15	-	-
Titanium(IV) Oxide	13463-67-7	5	-	-
Ethylene glycol	107-21-1	5	-	-

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### 4. FIRST AID MEASURES

**First Aid Measures** 

**General advice** Provide this SDS to medical personnel for treatment. After first aid, get appropriate in-plant,

paramedic, or community medical support.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. If eye irritation persists: Get medical

advice/attention.

Skin contact Wash with soap and water. Remove and wash contaminated clothing before reuse. If skin

irritation or rash occurs: Get medical advice/attention.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give

artificial respiration. Get medical attention immediately.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting

without medical advice. Never give anything by mouth to an unconscious person. Remove stomach contents by medical personnel only. Immediate medical attention is required.

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Most important symptoms and effects

Symptoms Causes eye irritation. Direct contact may cause temporary redness and discomfort. Causes

skin irritation. May cause respiratory irritation. Ingestion may cause nausea, vomiting,

dizziness, and headache. May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Skin and eye conditions may be aggravated by long term exposure.

Medical Conditions Aggravated by Long-Term Exposure: skin disorders and allergies and

eye conditions.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO2). Dry chemical. Alcohol foam.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

Ignition will give rise to a Class B fire. May generate toxic or irritating combustion products.

May generate carbon monoxide gas.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO2),

**Explosion Data** 

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

Keep containers cool with water spray. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways. NFPA Class IIIB.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective gloves/protective clothing and eye/face protection. Remove any

contaminated clothing and wash thoroughly before reuse.

Environmental precautions

**Environmental precautions**See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of liquid

spill for later disposal.

Methods for cleaning up Collect and place in suitable, properly labeled container for recovery or disposal. Dispose of

contents/container to an approved waste disposal plant. For waste disposal, see section 13

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of the SDS.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection recommended in Section 8. Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of

the workplace.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store contents under

<90F (32C). NFPA Class IIIB storage.

**Incompatible materials** Strong acids, peroxides, and other oxidizing agents

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Exposure Limits

Chemical Name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
		Limits - Ceilings		
Silica, Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Titanium(IV) Oxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Ethylene glycol 107-21-1	Ceiling: 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> Ceiling: 50 ppm	CEV: 100 mg/m <sup>3</sup>	Ceiling: 50 ppm Ceiling: 127 mg/m <sup>3</sup>

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Other Information If product is sanded, appropriate respirator should be worn to avoid breathing dust.

Pre-existing respiratory disorders may be aggravated by exposure. If sanded, this material may generate silica / titanium dust. Inhaled silica / titanium has been classified by IARC as

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a human carcinogen (see section 11).

Appropriate engineering controls

**Engineering controls** Provide general or local exhaust ventilation systems if possible. Maintain eye wash fountain

and quick-drench facilities in work area.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Chemical safety goggles/faceshield.

**Skin and body protection**Wear chemically protective gloves to prevent skin contact. Contaminated Equipment:

Separate contaminated work clothes from street clothes. Launder before reuse. Remove

this material from your shoes and clean personal protective equipment.

**Respiratory protection**None normally required. Use a NIOSH approved organic vapor chemical cartridge

respirator when air movement is inadequate to control vapor build-up.

**General hygiene considerations** Avoid contact with skin, eyes and clothing. After handling this product, wash hands before

eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before

ake first aid action shown on section 4 of this SDS. Launder contaminated clothing before

reuse.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical statePasteAppearanceWhite pasteColorWhiteOdorSlight

Odor Threshold No information available

Property Values Remarks • Method

pH >/= 2.0 - </= 12.0

Melting Point/Freezing Point Not determined

Boiling Point/Boiling Range Not determined

Flash Point No data available

Evaporation Rate Not determined

Flammability (Solid, Gas) Not determined

Flammability Limits in Air

Upper Flammability Limits
Lower Flammability Limit
Vapor Pressure
Vapor Density

Not available
Not available
Not determined
Not determined

Relative Density 1.4 (1=Water)

Water Solubility
Solubility in other solvents
Partition Coefficient
Auto-ignition Temperature
Decomposition Temperature
Kinematic Viscosity
Not determined

**Explosive properties**No information available. **Oxidizing properties**No information available.

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Other Information

Softening Point
Molecular weight
VOC Content (%)
Density
No information available

# 10. STABILITY AND REACTIVITY

**Reactivity** Not reactive under normal conditions.

Chemical Stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid** Keep out of reach of children.

**Incompatible Materials** Strong acids, peroxides, and other oxidizing agents.

Hazardous Decomposition Products Thermal oxidative decomposition can produce CO, CO2 in a fire.

# 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

**Eye contact** Causes serious eye irritation.

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

**Inhalation** May cause irritation of respiratory tract.

**Ingestion** May cause nausea, vomiting, stomach ache, and diarrhea.

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### **Numerical measures of toxicity**

### **Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document Not available.

Unknown acute toxicity No information available

**Component Information** 

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium(IV) Oxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 µL/kg (Rabbit)	-

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#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitization

Carcinogenicity

May cause an allergic skin reaction.

Crystalline Silica is considered to be a human carcinogen when in respirable form (dust / powder). Titanium dioxide is a possible carcinogen when it appears as a respirable dust.

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The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silica, Quartz 14808-60-7	A2	Group 1	Known	X
Titanium(IV) Oxide 13463-67-7	-	Group 2B	-	Х

#### Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)** 

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Ethylene glycol	6500 - 13000: 96 h	40000 - 60000: 96 h	EC50 = 10000 mg/L 16 h	46300: 48 h Daphnia
107-21-1	Pseudokirchneriella	Pimephales promelas	EC50 = 620 mg/L 30 min	magna mg/L EC50
	subcapitata mg/L EC50	mg/L LC50 static 27540:	EC50 = 620.0  mg/L  30	
		96 h Lepomis	min	
		macrochirus mg/L LC50		
		static 41000: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 40761: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 static 16000:		
		96 h Poecilia reticulata		
		mg/L LC50 static 14 - 18:		
		96 h Oncorhynchus		
		mykiss mL/L LC50 static		

Persistence/Degradability No information available.

**Bioaccumulation** No information available.

Mobility .

Chemical Name	Partition Coefficient
Ethylene glycol	-1.93
107-21-1	

Other Adverse Effects N

No information available.

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# 13. DISPOSAL CONSIDERATIONS

#### **Waste Treatment Methods**

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

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environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances

**DOT** Not regulated

TDG Not regulated

IATA Not regulated

<u>IMDG</u> Not regulated

# 15. REGULATORY INFORMATION

### **REGULATORY INFORMATION**

#### **International Regulations**

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

**Export Notification requirements** Not applicable

#### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Diglycidyl Ether of Bisphenol A	Х	Х		Present	Х	Present	Х	Х
Silica, Quartz	Х	Х	X	Present	X	Present	Х	Х
Titanium(IV) Oxide	X	Х	X	Present	Х	Present	Х	Х
Ethylene glycol	Х	Х	X	Present	Х	Present	Х	Х

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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# 16. OTHER INFORMATION. INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health Hazards 2 Flammability 1 Instability 0 Special Hazards Not

HMIS Health Hazards 2 \* Flammability 1 Physical hazards 0 Safety Glasses, Gloves

Chronic Hazard Star Legend \*= Chronic Health Hazard

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)
STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value
\* Skin designation

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Revision Note: New format.

### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

# **Safety Data Sheet**



Issue Date: 21-May-2013 Revision Date: 25-Oct-2017 Version 1

# 1. IDENTIFICATION

Product Identifier

Product Name PC CONCRETE EPOXY, PART B

Other means of identification

**SDS #** 130521-38B-CA

Synonyms None

UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use Adhesives

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier IdentifierManufacturer AddressTHIS SAFETY DATA SHEETProtective Coatings Co.

IS NOT COMPLIANT UNLESS 221 S Third St.

CANADIAN ADDRESS IS USED Allentown, PA 18102 USA 610-432-3543 / 800-220-2103

Emergency Telephone Number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

Appearance Black paste Physical state Paste Odour Slight

Classification

Acute toxicity - Dermal	Catagory 4
, , , , , , , , , , , , , , , , , , ,	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Skin sensitisation	Category 1
Reproductive toxicity	Category 2

### **Label Elements**

# Signal word

# Danger

#### **Hazard statements**

Harmful in contact with skin Causes severe skin burns and eye damage May cause an allergic skin reaction Suspected of damaging fertility or the unborn child



### **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapours/spray

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

### **Precautionary Statements - Response**

Immediately call a POISON CENTRE or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTRE or doctor

IF ON SKIN: Wash with plenty of water and soap

Call a POISON CENTRE or doctor if you feel unwell

Take off all contaminated clothing and wash it before reuse

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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

Immediately call a POISON CENTRE or doctor

IF SWALLOWED: rinse mouth. Do NOT induce vomiting

#### **Precautionary Statements - Storage**

Store locked up

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### Other Information

Very toxic to aquatic life with long lasting effects

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# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Silica, Quartz	14808-60-7	40	-	-
Nonyl phenol	84852-15-3	30	-	-
1-(2-Aminoethyl) piperazine	140-31-8	15	-	-
2,4,6-tri(dimethylaminomethyl)phenol	90-72-2	7	-	-
Benzyl alcohol	100-51-6	5	-	-
Ethylene glycol	107-21-1	1	-	-

# 4. FIRST AID MEASURES

**First Aid Measures** 

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediate medical attention is required.

**Skin contact** Wash with soap and water. Remove and wash contaminated clothing before reuse. Call a

POISON CENTRE/doctor/physician if you feel unwell. If skin irritation or rash occurs: Get

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medical advice/attention.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Immediate medical attention is required.

Most important symptoms and effects

Symptoms Causes severe skin burns and eye damage. Ingestion may cause severe burns to mouth,

throat or stomach. May cause an allergic skin reaction. May be harmful if swallowed.

Harmful in contact with skin.

Indication of any immediate medical attention and special treatment needed

**Note to doctors** Skin and eye conditions may be aggravated by long term exposure.

# 5. FIREFIGHTING MEASURES

**Suitable Extinguishing Media** Dry chemical, CO2 or water spray.

Unsuitable extinguishing media Not determined.

Specific hazards arising from the

chemical

No information available.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO2). Aldehydes. Nitrogen oxides (NOx).

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**Explosion Data** 

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways. NFPA Class IIIB.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective gloves/protective clothing and eye/face protection. Remove any

contaminated clothing and wash thoroughly before reuse.

Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dispose of contents/container to an approved waste disposal plant.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 7. HANDLING AND STORAGE

### Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Obtain special

instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wear appropriate personal protective equipment. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

**Incompatible materials** Strong acids, peroxides, and other oxidizing agents

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Exposure Limits

Chemical Name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
	9	Limits - Ceilings	g	
Silica, Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Ethylene glycol 107-21-1	Ceiling: 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> Ceiling: 50 ppm	CEV: 100 mg/m <sup>3</sup>	Ceiling: 50 ppm Ceiling: 127 mg/m <sup>3</sup>

Other Information If product is sanded, appropriate respirator should be worn to avoid breathing dust.

Pre-existing respiratory disorders may be aggravated by exposure. If sanded, this material may generate silica dust. Inhaled silica has been classified by IARC as a human carcinogen

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(see section 11).

Appropriate engineering controls

**Engineering controls** Provide general or local exhaust ventilation if product is sanded or ground.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear protective eyeglasses or chemical safety goggles.

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** Ensure adequate ventilation, especially in confined areas. If engineering controls do not

maintain airborne concentrations below recommended exposure limits, a NIOSH/MSHA

approved respirator must be worn.

General hygiene considerations Avoid contact with skin, eyes and clothing. After handling this product, wash hands before

eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before

reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical statePasteAppearanceBlack pasteColourBlackOdourSlight

Odour Threshold No information available

Property Values Remarks • Method

pH Not determined
Melting Point/Freezing Point Not determined
Boiling Point/Boiling Range Not determined
Flash Point No data available
Evaporation Rate Not determined
Flammability (Solid, Gas) Not determined

Flammability Limits in Air

Upper Flammability Limits Not determined

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Lower Flammability LimitNot determinedVapour PressureNot determinedVapour DensityNot determined

Relative Density 1.05 (1=Water)

Water Solubility
Solubility in other solvents
Partition Coefficient
Auto-ignition Temperature
Decomposition Temperature
Kinematic Viscosity
Not determined

**Explosive properties**No information available. **Oxidising properties**No information available.

Other Information

Softening Point
Molecular weight
VOC Content (%)
Density
No information available

# 10. STABILITY AND REACTIVITY

**Reactivity** Not reactive under normal conditions.

**Chemical Stability** Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

**Hazardous Polymerisation** Hazardous polymerisation does not occur.

**Conditions to Avoid** Keep out of reach of children.

**Incompatible Materials** Strong acids, peroxides, and other oxidizing agents.

Hazardous Decomposition Products None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

### **Product Information**

**Eye contact** Causes severe eye damage.

**Skin contact**Causes severe skin burns. May cause an allergic skin reaction. Harmful in contact with

skin.

**Inhalation** May cause irritation.

**Ingestion** May be harmful if swallowed. Ingestion may cause irritation to mucous membranes.

# Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

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### **Numerical measures of toxicity**

**Acute Toxicity** 

The following values are calculated based on chapter 3.1 of the GHS document ...

**ATEmix (oral)** 2493.76

mg/kg

ATEmix (dermal) 1811.92

mg/kg

Unknown acute toxicity No information available

**Component Information** 

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nonyl phenol 84852-15-3	= 1300 mg/kg (Rat)	= 2000 mg/kg ( Rabbit )	-
1-(2-Aminoethyl) piperazine 140-31-8	= 2140 μL/kg (Rat)	= 880 µL/kg (Rabbit)	-
2,4,6-tri(dimethylaminomethyl)p henol 90-72-2	= 1200 mg/kg (Rat)	= 1280 mg/kg (Rat)	-
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat)4 h
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 µL/kg (Rabbit)	-

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Respiratory or skin sensitisation** May cause an allergic skin reaction.

**Carcinogenicity** Silica (quartz) is a possible carcinogen when it appears as a respirable dust.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silica, Quartz	A2	Group 1	Known	X
14808-60-7		-		

### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labour)

X - Present

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

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# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	
Nonyl phenol 84852-15-3	0.16 - 0.72: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.36 - 0.48: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 1.3: 72 h Desmodesmus subspicatus mg/L EC50	0.135: 96 h Pimephales promelas mg/L LC50 flow-through 0.1351: 96 h Lepomis macrochirus mg/L LC50 flow-through	-	0.14: 48 h Daphnia magna mg/L EC50	
1-(2-Aminoethyl) piperazine 140-31-8	495: 72 h Pseudokirchneriella subcapitata mg/L EC50	1950 - 2460: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 100: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	EC50 > 10000 mg/L 17 h	32: 48 h Daphnia magna mg/L EC50	
Benzyl alcohol 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	static 460: 96 h	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min		
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 41000: 96 h Oncorhynchus mykiss mg/L LC50 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static	EC50 = 10000 mg/L 16 h EC50 = 620 mg/L 30 min EC50 = 620.0 mg/L 30 min	46300: 48 h Daphnia magna mg/L EC50	

Persistence/Degradability No information available.

**Bioaccumulation** No information available.

Mobility .

**Component Information** 

Chemical Name	Partition Coefficient		
1-(2-Aminoethyl) piperazine	-1.48		
140-31-8			
Benzyl alcohol	1.1		
100-51-6			
Ethylene glycol	-1.93		
107-21-1			

Other Adverse Effects No information available.

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# 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods** 

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

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environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

DOT

UN1760

Proper Shipping Name Corrosive Liquids, n.o.s (aminoethylpiperazine, nonylphenol)

Hazard Class 8
Packing Group III

<u>TDG</u>

UN1760

Proper Shipping Name Corrosive Liquids, n.o.s (aminoethylpiperazine, nonylphenol)

Hazard Class 8
Packing Group III

<u>IATA</u>

UN/ID No UN1760

Proper Shipping Name Corrosive Liquids, n.o.s (aminoethylpiperazine, nonylphenol)

Hazard Class 8
Packing Group III

<u>IMDG</u>

UN/ID No UN1760

Proper Shipping Name Corrosive Liquids, n.o.s (aminoethylpiperazine, nonylphenol)

Hazard Class8Packing GroupIIIMarine PollutantYes

# 15. REGULATORY INFORMATION

### **REGULATORY INFORMATION**

### **International Regulations**

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

**Export Notification requirements** Not applicable

### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Silica, Quartz	X	X	X	Present	X	Present	X	X
Nonvi phenol	Х	Х	Х	Present	Х	Present	Х	Х

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1-(2-Aminoethyl) piperazine	Х	Х	Х	Present	Х	Present	Х	Х
2,4,6-tri(dimethylami nomethyl)phenol	Х	Х	Х	Present	Х	Present	Х	Х
Benzyl alcohol	Х	Х	Х	Present	Х	Present	Х	Х
Ethylene glycol	X	X	X	Present	Χ	Present	X	X

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

# 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health Hazards 3 Flammability 1 Instability 0 Special Hazards Not

determined

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HMIS Health Hazards 3 \* Flammability 1 Physical hazards 0 Personal Protection B

Chronic Hazard Star Legend \*= Chronic Health Hazard

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)
STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value
\* Skin designation

Issue Date: 21-May-2013

Revision Date: 25-Oct-2017

Revision Note: New format.

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

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