

#### **EPOXY HARDENER - PART B**

### 1. Identification

Product identifier: EPOXY HARDENER - PART B

Product code: EPO-100B-500

Supplier Name: SamaN

660 Rue du Filtre Victoriaville, Québec

G6T 0T6

**Telephone:** 819 751-2350

Emergency telephone number: 819-751-2350

Available hours: 8h-17h Monday to Friday

Recommended use: 2-component epoxy system for counter, bar and wooden table (mix ratio 1: 1)

Restrictions on use: For interior use only

# 2. Hazard identification

Signal word: DANGER

Product classification:







Skin corrosion-Category 1. Serious eye damage-Category 1. Health hazards not otherwise classified-Category 1

Corrosive. Corrosive to metals-Category 1.

Reproductive toxicity-Category 2. Specific target organ toxicity – repeated exposure-Category 2.

Skin sensitization-Category 1. Acute toxicity-oral-Category 4.

Hazard statement(s): Causes severe skin burns and eye damage. Causes serious injury to the respiratory tract. May cause an allergic skin reaction. Harmful if swallowed. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May be corrosive to metals.

### Precautionary statement(s)

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist,



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vapors and spray. Wash hands thoroughly after handling and any other part of the body that may have been exposed to the product. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye and face protection. Keep only in original packaging.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation or a rash occurs: Get medical advice. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice. Take off contaminated clothing and wash it before reuse. Absorb spillage to prevent material-damage.

Storage: Store locked up. Store in a corrosive resistant with a resistant inner liner.

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

Other hazards: Moderately toxic by intraperitoneal route.

See toxicological information, section 11

# 3. Composition/Information on ingredients

No	CAS No	Common name and synonyms	Concentration %
			(w/w)
1	84852-15-3	4-Nonylphenol, branched	30 - 60
2	9046-10-0	Polypropylene glycol diamine	10 - 30
3	140-31-8	N-Aminoethyl piperazine	5 - 10
4	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	5 - 10
5	100-51-6	Benzyl alcohol	1- 5

The actual concentration ranges are withheld as a trade secret.



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### 4. First-aid measures

If swallowed, irritation, any type of overexposure or symptoms of overexposure occur during use of the product or persists after use, immediately contact a POISON CENTER, an EMERGENCY ROOM or a PHYSICIAN; ensure that the product safety data sheet is available.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation:** Move exposed person to fresh air. Keep this person warm and lying down. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

**Ingestion:** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Symptoms:** This product is irritating and corrosive to skin, eyes, respiratory and digestive tracts. The severity of symptoms can vary depending on the exposure conditions (contact time, product concentration, etc.). The worker may develop cutaneous hypersensitivity. The main symptoms of intoxication include headache, nausea, vomiting, weakness, loss of appetite, fatigue, sweating, fever, tachycardia and dyspnea. In the most severe cases, convulsions, hyperthermic coma, liver damage are reported and sometimes death.

Effects (acute or delayed): If on skin, this product causes severe burns. Contact with eyes may cause redness, tearing, edema, pain, corneal opacity and even blindness. May cause skin sensitization. Inhalation of high concentrations vapors can cause severe burns to the mouth and airways leading to the lungs. Ingestion may cause severe burns to the mouth and digestive tract with possible perforation of the esophagus and stomach.

**Immediate medical attention and special treatment:** No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



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### 5. Fire-fighting measures

Suitable extinguishing media: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing media: Jets of water can facilitate the spread of fire.

Specific hazards arising from the hazardous product: May release dangerous fumes.

Hazardous combustion products: Carbon monoxide and dioxide. Nitrogen oxides.

**Special protective equipment and precautions for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# 6. Accidental release measures

**Personal precautions:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Protective equipment and emergency procedures:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion proof equipment. Dispose of via a licensed waste disposal contractor.

# SAMAN

### **Safety Data Sheet**

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### 7. Handling and storage

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatibility: Strong oxidizing agents. Acids. Finely divided metals (Ba, Be, Na, P, Al, Mg etc).

# 8. Exposure controls/Personal protection

No	CAS No	Common name and synonyms	IDHL mg/m3	TWA mg/m3	STEL mg/m3	CEIL mg/m3
1	84852-15-3	4-Nonylphenol, branched	Not available	Not available	Not available	Not available
2	9046-10-0	Polypropylene glycol diamine	Not available	Not available	Not available	Not available
3	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	Not available	Not available	Not available	Not available
4	140-31-8	N-Aminoethyl piperazine	Not available	Not available	Not available	Not available
5	100-51-6	Benzyl alcohol	Not available	Not available	Not available	Not available

IDHL: Immediately Dangerous to Life or Health Concentrations

TWA : Time Weighted Average STEL: Short -Term Exposure Limit

**CEIL: Ceiling Limit** 

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.



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**Individual protection measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes: DO NOT WEAR CONTACT LENSES Wear anti-splash safety goggles.

**Hands:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.

**Respiratory:** If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Others: Wear protective clothing with long sleeves and appropriate safety shoes at all times.

# 9. Physical and chemical properties

Physical state: Liquid
Colour: Very pale yellow

Odour: Odorless

Odour threshold: Not applicable

pH: Not applicable

Melting/Freezing point: < 0 °C (32 °F)

Initial boiling point/boiling range: > 200 °C (392 °F)

Flash point: Not applicable

Lower flammable/explosive limit: Not applicable
Upper flammable/explosive limit: Not applicable
Auto-ignition temperature: Not applicable

Evaporation rate: Not available

Vapour pressure: < 1 mm Hg at 20 °C

Vapour density: > 1 (air=1)

Specific gravity: 0,970 kg/L at 20 °C (water = 1)

Solubility in water: Insoluble

Partition coefficient - n-octanol/water: Not applicable

Decomposition temperature: Not available

Kinematic viscosity: Not available



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# 10. Stability and reactivity

Reactivity: Stable under recommended conditions of storage and handling.

Chemical stability: The product is chemically stable under normal conditions of use.

Possibility of hazardous reactions: No dangerous or polymerization reactions will not occur under normal conditions of use.

Conditions to avoid: Keep away from incompatible products.

Incompatible materials: This product can attack metals, certain types of plastic, rubber or coatings.

Hazardous decomposition products: Carbon monoxide and dioxide. Nitrogen oxides.

# 11. Toxicological information

No	CAS No	Common name and synonyms	(1) LD	(2) LD	(3) LD	(4) LC	(5) LC	(6) LC
			oral	skin	skin	gases	vapours	dusts-mist
1	84852-15-3	4-Nonylphenol, branched	1300	2031	2031	Not	> 20.00	> 5.00
						applicable		
2	9046-10-0	Polypropylene glycol diamine	2885	2980	2980	Not	>20.00	>5.00
						applicable		
3	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	500	2110	2110	Not	Not	> 5.00
						applicable	applicable	
4	140-31-8	N-Aminoethyl piperazine	2110	868	868	Not	>20.00	>5.00
						applicable		
5	100-51-6	Benzyl alcohol	1230	>2000	>2000	Not	>20.00	>4.18
						applicable		

(1) LD<sub>50</sub> oral mg/kg

(2)  $LD_{50}$  skin mg/kg

(3) LD<sub>50</sub> skin mg/kg

(4) LC<sub>50</sub> inhalation ppmV 4h gases

(5) LC<sub>50</sub> inhalation mg/l 4h vapours

(6) LC<sub>50</sub> inhalation mg/l 4h dusts-mist

Routes of exposure: This product is not absorbed in the body, it exerts a local action that destroys tissue.



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**Symptoms:** This product is irritating and corrosive to skin, eyes, respiratory and digestive tracts. The severity of symptoms can vary depending on the exposure conditions (contact time, product concentration, etc.). The worker may develop cutaneous hypersensitivity. The main symptoms of intoxication include headache, nausea, vomiting, weakness, loss of appetite, fatigue, sweating, fever, tachycardia and dyspnea. In the most severe cases, convulsions, hyperthermic coma, liver damage are reported and sometimes death.

**Delayed and immediate effects:** If on skin, this product causes severe burns. Contact with eyes may cause redness, tearing, edema, pain, corneal opacity and even blindness. May cause skin sensitization. Inhalation of high concentrations vapors can cause severe burns to the mouth and airways leading to the lungs. Ingestion may cause severe burns to the mouth and digestive tract with possible perforation of the esophagus and stomach.

No	CAS No	Common name and synonyms	IARC	ACGIH	Mutagenicity	Effect on
						reproduction
1	84852-15-3	4-Nonylphenol, branched	Not available	Not available	Not available.	May impair
						fertility. May
						cause harm to the
						unborn child.
2	9046-10-0	Polypropylene glycol diamine	Not available	Not available	Not available.	Not available.
3	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	Not available	Not available	Not available.	Not available.
4	140-31-8	N-Aminoethyl piperazine	Not available	Not available	The data do not	Experimental
					allow for an	teratogen.
					adequate	
					assessment of	
					mutagenic effects.	
5	100-51-6	Benzyl alcohol	4	A5	The data do not	The data do not
					allow for an	allow for an
					adequate	adequate
					assessment of	evaluation of the
					mutagenic effects.	effects on
						development.

### Cancer classification under IARC (International Agency for Research on Cancer)

Group 1: carcinogenic to humans.

Group 2A: probably carcinogenic to humans.

Group 2B: possibly carcinogenic to humans.

Group 3: not classifiable as to its carcinogenicity to humans.

Group 4: probably not carcinogenic to humans.

### Cancer classification under ACGIH (American Conference of Governmental Industrial Hygienists)

Group A1: confirmed human carcinogen.



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Group A2: suspected human carcinogen.

Group A3: confirmed animal carcinogen with unknown relevance to humans.

Group A4: not classifiable as a human carcinogen. Group A5: not suspected as a human carcinogen.

# 12. Ecological information

No	CAS No	Common name and synonyms	%	Persistent	Bio-accumulation	Aquatic ecotoxicity
1	84852-15-3	4-Nonylphenol, branched	30.00% - 60.00%		No	Yes
2	9046-10-0	Polypropylene glycol diamine	10.00% - 30.00%		No	Yes
3	140-31-8	N-Aminoethyl piperazine	5.00% - 10.00%		No	No
4	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	5.00% - 10.00%		N/A	N/A
5	100-51-6	Benzyl alcohol	1.00% - 5.00%	No	No	No

No	CAS No	Common name and synonyms	%	Ecotoxicity for	Ecotoxicity for	Environnemental
				aquatic	aquatic	effects
				organisims-Short	organisims-Long	
				term	term	
1	84852-15-3	4-Nonylphenol, branched	30.00%	Very toxic to	Very toxic to	No known
			-	aquatic life.	aquatic life with	adverse effect to
			60.00%		long lasting	the environment.
					effects.	
2	9046-10-0	Polypropylene glycol diamine	10.00%	Not available.	Harmful to aquatic	No known
			-		life with long	adverse effect to
			30.00%		lasting effects.	the environment.
3	140-31-8	N-Aminoethyl piperazine	5.00% -	Not available.	Harmful to aquatic	No known
			10.00%		life with long	adverse effect to
					lasting effects.	the environment.
4	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	5.00% -	Not available.	Toxic to aquatic	No known
			10.00%		life with long	adverse effect to
					lasting effects.	the environment.



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5	100-51-6	Benzyl alcohol	1.00% -	No known	No known	No known
			5.00%	adverse effect to	adverse effect to	adverse effect to
				aquatic life.	aquatic life.	the environment.

# 13. Disposal considerations

**Methods of disposal:** The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

# 14. Transport information

	TDG	DOT	IMDG	IATA
UN number	1760	1760	1760	1760
Proper shipping name	CORROSIVE LIQUID,	CORROSIVE LIQUID,	CORROSIVE LIQUID,	CORROSIVE LIQUID,
	N.O.S. (4-Nonylphenol,	N.O.S. (4-Nonylphenol,	N.O.S. (4-Nonylphenol,	N.O.S. (4-Nonylphenol,
	branched , Polypropylene	branched , Polypropylene	branched , Polypropylene	branched , Polypropylene
	glycol diamine,	glycol diamine,	glycol diamine,	glycol diamine,
	N-Aminoethyl piperazine)	N-Aminoethyl piperazine)	N-Aminoethyl piperazine)	N-Aminoethyl piperazine)
Transport hazard class(es)	8	8	8	8
Packing group	II	II	II	II

#### Other information

Marine pollutant: No

IMDG: Not applicable

Exemption for limited quantity: 1 L

In accordance with the Canadian Transport of Dangerous Goods regulations by Road, we use the 1.17 exemption when applicable. In accordance with 49 CFR article 172.315 for transportation by a mode other than air, we use the Limited quantities exemption when applicable.

Special precautions: Not applicable



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Others exemptions: No other exemption.

# 15. Regulatory information

### Canada

No	CAS No	Common name and synonyms	%	DSL	NDSL	NPRI
1	84852-15-3	4-Nonylphenol, branched	30.00%	Х		
			-			
			60.00%			
2	9046-10-0	Polypropylene glycol diamine	10.00%	Х		
			-			
			30.00%			
3	140-31-8	N-Aminoethyl piperazine	5.00% -	Х		Х
			10.00%			
4	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	5.00% -	Х		
			10.00%			
5	100-51-6	Benzyl alcohol	1.00% -	х		Х
			5.00%			

### **United-States**

No	CAS No	Common name and synonyms	%	TSCA	PROP-65	Right to Know
1	84852-15-3	4-Nonylphenol, branched	30.00%	Х		
			-			
			60.00%			
2	9046-10-0	Polypropylene glycol diamine	10.00%	Х		
			-			
			30.00%			
3	140-31-8	N-Aminoethyl piperazine	5.00% -	Х		Х
			10.00%			
4	1761-71-3	4,4'-Methylenebis(cyclohexylamine)	5.00% -	Х		
			10.00%			
5	100-51-6	Benzyl alcohol	1.00% -	Х		
			5.00%			

The customer is responsible for determining the PPE (personal protection equipment) code for this material. The classification of the product and the SDS were developed in accordance with HPR and HazCom 2012.



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### 16. Other information

Date: 2019-11-14

Version: 1

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