

**SAFETY DATA SHEET**

Quantum Technical Services Ltd.

**Section 1. Product and Company Identification**

Product Name	<b>SafeCoat Clear II Part A</b>
Manufacturer	Quantum Technical Services Ltd. (Dba Quantum Chemical) 15 Riel Drive St. Albert, AB, Canada T8N 3Z2 Tel: (780) 458-3355 (non-emergency phone number) Fax: (780) 458-2852 <a href="http://www.quantumchemical.com">www.quantumchemical.com</a>
Chemical Emergencies	For 24-Hour Emergency call Canutec at 613.996.6666

**Section 2. Hazards Identification****2.1 Classification:**

<b>GHS Classification:</b>	<b>Flammable Liquids</b>	<b>Category 2</b>
	<b>Acute Toxicity: Inhalation</b>	<b>Category 4</b>
	<b>Acute Toxicity: Dermal</b>	<b>Category 4</b>
	<b>Skin Corrosion/Irritation</b>	<b>Category 2</b>
	<b>Serious Eye Damage/Eye Irritation</b>	<b>Category 2A</b>
	<b>Skin Sensitization</b>	<b>Category 1</b>
	<b>Specific Target Organ Toxicity: Single Exposure</b>	
	<b>Central Nervous System</b>	<b>Category 1</b>
	<b>Respiratory Tract</b>	<b>Category 3</b>
	<b>Specific Target Organ Toxicity: Repeated Exposure</b>	
	<b>Skin</b>	<b>Category 1</b>

**2.2 Label Elements:****Pictogram:****Signal Word:** **Danger**

**Hazard Statements:**

**H225** Highly Flammable liquid and vapour.  
**H315** Causes skin irritation.  
**H317** May cause allergic skin reaction.  
**H319** Causes serious eye irritation.  
**H332** Harmful if Inhaled.  
**H335** May cause respiratory irritation.  
**H336** May cause drowsiness or dizziness.  
**H370** Causes damage to organs (central nervous system).  
**H372** Causes damage to organs through prolonged or repeated exposure: skin.

<b>Precautionary Statements:</b>	<p><b>P280</b> Wear protective gloves/protective clothing/eye protection/face protection.</p> <p><b>P210</b> Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p><b>P233</b> Keep container tightly closed.</p> <p><b>P261</b> Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p><b>P271</b> Use only outdoors or in a well ventilated area.</p> <p><b>P264</b> Wash face, hands and any exposed skin thoroughly after handling.</p> <p><b>P272</b> Contaminated work clothing should not be allowed out of the workplace.</p>
<b>Response:</b>	<p><b>P370+P378</b> In case of fire: Use water spray, carbon dioxide, dry chemical, or foam to extinguish.</p> <p><b>P303+P361+P353</b> IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</p> <p><b>P304+P340+P312</b> IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.</p> <p><b>P305+P351+P338</b> 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 attention.</p> <p><b>P332+P313</b> If skin irritation occurs: Get medical advice/attention.</p> <p><b>P362+P364</b> Take off contaminated clothing and wash before reuse.</p>
<b>Storage:</b>	<b>P405</b> Store locked up.
<b>Disposal:</b>	<b>P501</b> Dispose of contents/containers in accordance with local/regional/national/international regulations.

### Section 3. Composition and Ingredient Information

Hazardous Ingredients	%	C.A.S. #	LD <sub>50</sub>	LC <sub>50</sub>
Ammonium Polyphosphate	30-60	68333-79-9	Oral (Rat) >2,000 mg/kg	
Epoxy Resin Adduct**	10-30	Proprietary**	Oral (Rat) 1,163 mg/kg	Inhalation (Rat) > 11.3 mg/L
Tert-butyl acetate	1-5	540-88-5		Inhalation (estimate) 11 mg/L
4-4'Isopropylidenediphenol-Epichlorohydrin Copolymer	7-30	25068-38-6	Oral (Rat) 11,400 mg/kg	
Trimethylolpropane Triacrylate	7-13	15625-89-5	Oral (Rat) 5,190 mg/kg	

\*\*HMIRA RN 03330779 Date Granted 2023-02-17

Note: Concentration ranges are given to protect intellectual property.

### Section 4. First Aid Measures

Eye Contact:	Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. Check for and remove any contact lenses. If irritation persists, repeat flushing. Obtain medical attention. If necessary, call a physician.
Skin Contact:	Remove contaminated clothing. Wash affected areas thoroughly with plenty of soap and water. If irritation, redness or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse.
Inhalation:	Remove patient from exposure, keep warm and at rest. If breathing is labored, oxygen should be administered by qualified personnel. Obtain medical attention if there are persistent symptoms.

Ingestion: Wash out mouth with water. If material has been swallowed and exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. Get medical attention. If necessary, call a poison center or Physician.

## Section 5. Fire Fighting Measures

Extinguishing Media: Alcohol-resistant foam. Carbon dioxide, dry chemical.

Unsuitable Extinguishing Media: Full water jet.

Hazardous Combustion Products: Carbon Oxides.

Special Protective Equipment and Precautions for Firefighters: Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing.

Special Hazards: Keep containers cool by spraying with water if exposed to fire.

## Section 6. Accidental Release Measures

Personal Precautions: Remove all sources of ignition. Ventilate area.  
In addition to the protective clothing/equipment in Section 8, wear impermeable boots.

Method for Clean-Up: Evacuate all non-essential personnel. Dike area to prevent spreading. Cover spills with some inert absorbent material, sweep up and place in a waste disposal container. Remove containers to a safe place and cover loosely.

Environmental Precautions: Avoid release to environment.

## Section 7. Handling and Storage

Handling: Put on appropriate personal protective equipment (see section 8).  
Precautions: Avoid release to environment. Keep away from heat, sparks and open flame. No smoking. Wear protective gloves and eye/face protection. Wash hands thoroughly after handling.

Persons with a history of skin sensitization problems should not be employed in any process in which this product is used.

Special Handling Statements: Provide adequate ventilation of working area.

Storage Needs: Store in a cool dry, well ventilated space and keep container tightly closed. Keep away from source of ignition. Take precautionary measures against electrostatic loading – earthing necessary during loading operations. Observe the general rules of industrial fire protection.

## Section 8. Exposure Controls and Personal Protection

### Occupational Exposure Limits:

Ammonium Polyphosphate	None
Epoxy Resin Adduct	None
Tert-butyl acetate	TWA 200 ppm, 950 mg/m <sup>3</sup> Basis: CA (AB, BC, QC) OEL
4-4'Isopropylidenediphenol-	None
Epichlorohydrin Copolymer	
Trimethylolpropane Triacrylate	AIHA WEEL (1999-01-01) TWA 1 mg/m <sup>3</sup>

**Protective Equipment:**

Respiratory:	Use respiratory protection unless adequate local exhaust ventilation is provided. Filter type: Organic Vapor Type.
Eye Protection:	Safety Glasses, if possibility of splashing exists wear tightly fitting safety goggles.
Gloves:	Chemical-resistant, impervious gloves.
Clothing:	Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.
Other/Type:	Eyewash fountain. Emergency shower should be in close proximity.
Ventilation Requirements:	Where the material is not used in a closed system. Good enclosure and local exhaust ventilation should be provided to control exposure.

**Section 9. Physical and Chemical Properties**

Physical State:	Liquid.
Appearance:	Clear.
Odour:	Sweet Mild.
Odour Threshold:	Not available.
Specific Gravity (H <sub>2</sub> O=1):	Approximately 1.4 at 20°C.
Flash Point:	48.5°C.
Vapor Pressure (mm Hg):	Not available.
Vapor Density (Air=1):	Not available.
Evaporation Rate:	Not available.
Boiling Point:	Not available.
pH:	Not available.
Solubility in Water:	Insoluble.
Freezing Point:	Not available.
Melting Point:	Not available.
% Solids by Weight:	96.9.
% Volatile:	2.7.
VOC:	0.
Viscosity:	2500-7500 cp (approximate).
Flammability:	Flammable.
Upper/Lower Explosion/ Flammability Limit:	Not available.
Partition coefficient (n-Octanol/Water):	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.

**Section 10. Stability and Reactivity**

Stability:	Stable under normal conditions.
Conditions to Avoid:	Keep away from heat, flame, sparks, and other ignition sources.
Polymerization:	Caustic Soda (sodium hydroxide) can induce vigorous polymerization at temperatures around 200°C.
Incompatibility:	Strong oxidizing agents, sodium hydroxide, acids, bases, nitrates, plastics, Amines and Lewis acids.
Hazardous Products of Decomposition:	Acetic Acid. Carbon Oxides.

## Section 11. Toxicological Information

No data for product itself.

<b>Acute Toxicity:</b>	<b>LD50</b>			<b>LC50</b>		
Ammonium Polyphosphate	Oral	Rat	>2000 mg/kg			
Epoxy Resin Adduct	Oral	Rat	1,163 mg/kg	Inhalation	Rat	>11.3 mg/L
	Dermal	Rabbit	1,130 mg/kg			
Tert-butyl acetate				Inhalation (estimate)		11 mg/L
4-4'Isopropylidenediphenol- Epichlorohydrin Copolymer	Oral	Rat	11,400 mg/kg			
	Dermal	Rat	2,000 mg/kg			
Trimethylolpropane Triacrylate	Oral	Rat	5,190 mg/kg			
	Dermal	Rat	5,170 mg/kg			

**Irritant:** Causes serious eye irritation.

**Carcinogenicity:** Not Available

**Mutagenicity:** Not Available

**Specific Target Organ Toxicity:**

Epoxy Resin Adduct Respiratory Tract (Irritation); Central Nervous System; Skin; Liver.

Tert-butyl acetate Respiratory Tract (Irritation); Central Nervous System.

4-4'Isopropylidenediphenol-  
Epichlorohydrin Copolymer Respiratory Tract (Irritation).

Trimethylolpropane Triacrylate Respiratory Tract (Irritation): Single Exposure.  
Skin: Repeated Exposure.

**Potential Chronic Health Effects:**

Epoxy Resin Adduct,  
4-4'Isopropylidenediphenol-  
Epichlorohydrin Copolymer/  
Trimethylolpropane Triacrylate Once sensitized a severe allergic reaction may occur when subsequently exposed to very low levels.

**Symptoms of Overexposure:**

Tert-butyl acetate : Headache, dizziness, tiredness, nausea and vomiting.  
Concentrations well above the TLV may cause narcotic effects.

## Section 12. Ecological Information

<b>Toxicity:</b>	No data for product itself.			
Ammonium polyphosphate	Acute: Fish (rainbow trout)	96-hour	LC50	123 mg/L
Epoxy Resin Adduct	Acute: Fish (Zebra danio)	96-hour	LC50	24 mg/L
	Acute: Daphnia	24-hour	EC50	76 mg/L
	Acute: Algae	72-hour	LC50	110 mg/L
Tert-butyl acetate	No data available			

4-4'Isopropylidenediphenol-  
Epichlorohydrin Copolymer/  
Trimethylolpropane Triacrylate  
(Reaction Product)

Acute: Fish	96-hour	LC50	1.3 mg/L
Acute: Daphnia	24-hour	EC50	2.1 mg/L
Acute: Daphnia	21-day	NOEC	0.3 mg/L (Magna Reproductive Test)
Acute: Algae	72-hour	LC50	11 mg/L

**Persistence/Degradability:** Not Available

**Bioaccumulation Potential:**

Epoxy Resin Adduct	LogPow	-0.269- 0.15
	BCF	-
	Potential	Low

4-4'Isopropylidenediphenol-  
Epichlorohydrin Copolymer

LogPow	2.64-3.78
BCF	3-31.00
Potential	Low

## Section 13. Disposal Considerations

Waste Disposal: The generation of waste should be avoided or minimized wherever possible.  
Disposal should be in accordance with federal, provincial and municipal regulations.

## Section 14. Transport Information

Canada: TDG: UN1263, PAINT, FLAMMABLE, CLASS 3 Packaging Group III  
IATA: UN1263, PAINT, FLAMMABLE, CLASS 3 Packaging Group III

This product is classified as Class 3 based on results of lab testing.

## Section 15. Regulatory Information

Canada: DSL: All components listed or exempt

USA: TSCA: All components listed or exempt

## Section 16. Other Information

Revision Date: March 13, 2023

Note: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Quantum Technical Services Limited. The data on this sheet relates only to the specific material designated herein. Quantum Technical Services Ltd. assumes no legal responsibility for use or reliance upon these data.

## Section 1. Product and Company Identification

Product Name	<b>SafeCoat Clear II Part B</b>
Manufacturer	Quantum Technical Services Ltd. (Dba Quantum Chemical) 15 Riel Drive St. Albert, AB, Canada T8N 3Z2 Tel: (780) 458-3355 (non-emergency phone number) Fax: (780) 458-2852 <a href="http://www.quantumchemical.com">www.quantumchemical.com</a>
Chemical Emergencies	For 24-Hour Emergency call Canutec at 613.996.6666

## Section 2. Hazards Identification

### 2.1 Classification:

<b>GHS Classification:</b>	<b>Flammable Liquids</b>	<b>Category 2</b>
	<b>Acute Toxicity: Oral</b>	<b>Category 4</b>
	<b>Acute Toxicity: Dermal</b>	<b>Category 4</b>
	<b>Acute Toxicity: Inhalation</b>	<b>Category 4</b>
	<b>Skin Corrosion/Irritation</b>	<b>Category 1C</b>
	<b>Serious Eye Damage/Eye Irritation</b>	<b>Category 1</b>
	<b>Respiratory Sensitization</b>	<b>Category 1</b>
	<b>Skin Sensitization</b>	<b>Category 1</b>
	<b>Toxic to Reproduction</b>	<b>Category 2</b>
	<b>Specific Target Organ Toxicity: Single Exposure</b>	
	<b>Respiratory Tract Irritation/Narcotic Effects</b>	<b>Category 3</b>
	<b>Lungs; Skin</b>	<b>Category 1</b>
	<b>Specific Target Organ Toxicity: Repeated Exposure</b>	
	<b>Skin; Blood System; Central Nervous System;</b>	
	<b>Respiratory Tract; Lungs; Liver</b>	<b>Category 1</b>

### 2.2 Label Elements:

#### Pictogram:



**Signal Word:** Danger

**Hazard Statements:**

- H225** Highly Flammable liquid and vapour.
- H332** Harmful if inhaled.
- H302** Harmful if swallowed.
- H312** Harmful in contact with skin.
- H314** Causes severe skin burns and eye damage.
- H315** Causes skin irritation.
- H317** May cause allergic skin reaction.
- H319** Causes serious eye irritation.
- H334** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**H361fd** Suspected of damaging fertility. Suspected of damaging unborn child.  
**H335** May cause respiratory irritation.  
**H336** May cause drowsiness or dizziness.  
**H370** Causes damage to organs (lungs, skin)  
**H372** Causes damage to organs through prolonged or repeated exposure: skin, blood system, central nervous system, respiratory tract, lungs, liver.

**Precautionary Statements:**

**P201** Obtain special instructions before use.  
**P202** Do not handle until all safety instructions have been read and understood.  
**P210** Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.  
**P233** Keep container tightly closed.  
**P240** Ground and bond container and receiving equipment.  
**P241** Use explosion proof electrical/ventilating/lighting equipment.  
**P242** Use non sparking tools.  
**P243** Take action to avoid static discharge.  
**P280** Wear protective gloves/protective clothing/eye protection/face protection.  
**P284** [In case of inadequate ventilation] wear respiratory protection.  
**P261** Avoid breathing dust/fume/gas/mist/vapours/spray.  
**P270** Do not eat, drink or smoke when using this product.  
**P271** Use only outdoors or in a well ventilated area.  
**P264** Wash face, hands and any exposed skin thoroughly after handling.  
**P272** Contaminated work clothing should not be allowed out of the workplace.

**Response:**

**P314** Get medical attention if you feel unwell.  
**P308+P313** If exposed or concerned: Get medical attention.  
**P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
**P333+P313** If skin irritation or rash occurs: Get medical advice/attention.  
**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/doctor.  
**P342+P311** If experiencing respiratory symptoms: call a POISON CENTER/doctor.  
**P301+P310** IF SWALLOWED: Immediately call a Poison Center/doctor.  
**P330+P331** Rinse mouth. Do NOT induce vomiting.  
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P310** Immediately call a POISON CENTER/doctor.  
**P370+P378** In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam to extinguish.

**Storage:**

**P405** Store locked up.  
**P403+P233+P235** Store in a well-ventilated space. Keep container cool. Keep container tightly closed.

**Disposal:**

**P501** Dispose of contents/containers in accordance with local/regional/national/ international regulations.

### Section 3. Composition and Ingredient Information

Hazardous Ingredients	%	C.A.S. #	LD <sub>50</sub>	LC <sub>50</sub>	
Benzyl Alcohol	< 22	100-51-6	Oral (rat) 1,230 mg/kg	Inhalation (rat)	>4.178 mg/L
Isophorone Diamine	<22	2855-13-2	Oral (rat) 1,030 mg/kg		
Phenol,4-Nonyl-, Branched	<22	84852-15-3	Oral (rat) 1,300 mg/kg		
N-(aminoethyl)piperazine	<22	140-31-8	Oral (rat) >1,000 mg/kg		
Diethylenetriamine	0.2-1.0	111-40-0	Oral (rat) 1,080 mg/kg		
Polyether modified polysiloxane	0.2				
Tertiary butyl acetate	55.5	540-88-5		Inhalation (estimate)	11mg/L

Note: Concentration ranges not given are withheld by raw material supplier as trade secret.



## Section 4. First Aid Measures

Eye Contact:	Get medical attention immediately. Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. Check for and remove any contact lenses. Chemical burns must be promptly treated by a Physician.
Skin Contact:	Get medical attention immediately. Remove contaminated clothing. Wash affected areas thoroughly with plenty of soap and water. Chemical burns must be promptly treated by a Physician. Contaminated clothing should be thoroughly cleaned before reuse.
Inhalation:	Get medical attention immediately. Remove patient from exposure, keep warm and at rest. If breathing is labored, oxygen should be administered by qualified personnel. Obtain medical attention if there are persistent symptoms. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion:	Get medical attention immediately. Wash out mouth with water. If material has been swallowed and exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Only induce vomiting at the instruction of a physician. Chemical burns must be promptly treated by a Physician. Never give anything by mouth to an unconscious person.

## Section 5. Fire Fighting Measures

Extinguishing Media:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable Extinguishing Media:	None known.
Special Protective Equipment and Precautions for Firefighters:	Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing.
Special Hazards:	Keep containers cool by spraying with water if exposed to fire.

## Section 6. Accidental Release Measures

Personal Precautions:	Do not touch or walk through spilled material. Avoid breathing vapor or mist. Put on appropriate personal protective equipment (section 8).
Method for Clean-Up:	Cover spills with some inert absorbent material, sweep up and place in a waste disposal container.
Environmental Precautions:	Avoid release to environment. Inform relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

## Section 7. Handling and Storage

Handling:	Put on appropriate personal protective equipment (see section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure – obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.  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. See section 8 for additional information on hygiene measures.
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Storage Needs: Store in a cool dry, well ventilated space, protected from direct sunlight, and away from incompatible materials (see section 10). Store locked up. Keep container tightly closed and sealed until ready for use. Do not store in unlabeled containers.

## Section 8. Exposure Controls and Personal Protection

### Occupational Exposure Limits:

Benzyl Alcohol	TWA 10 ppm
Diethylenetriamine	(ACGIH TLV) TWA 4.2 mg/m <sup>3</sup> , 1 ppm (skin) (NIOSH REL) TWA 4 mg/m <sup>3</sup> , 1 ppm (OSHA PEL) TWA 4 mg/m <sup>3</sup> , 1 ppm
Tert-butyl acetate	TWA 200 ppm, 950 mg/m <sup>3</sup>
Hydrous Aluminum Silicate	(ACGIH TLV) TWA 2.0 mg/m <sup>3</sup> (respirable dust) (OSHA PEL) TWA 5.0 mg/m <sup>3</sup> (respirable dust)

### Protective Equipment:

Eye/Face Protection:	Safety eyewear complying with an approved standard should be used. If contact is possible wear chemical splash goggles.
Respiratory:	Use respiratory protection unless adequate local exhaust ventilation is provided. Filter type: Organic Vapor Type.
Gloves:	Chemical-resistant, impervious gloves.
Clothing:	Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.
Other/Type:	Eyewash fountain. Emergency shower should be in close proximity.
Appropriate Engineering Controls:	Use only with adequate ventilation. If user operations generate fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below recommended or statutory limits.
Hygiene Measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, using the washroom and at the end of working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing.

## Section 9. Physical and Chemical Properties

Physical State:	Liquid.
Odor and Appearance:	Pungent, characteristic.
Specific Gravity (H <sub>2</sub> O=1):	Not available.
Odor Threshold (ppm):	Not available.
Vapor Pressure (mm Hg):	Not available.
Vapor Density (Air=1):	Not available.
Evaporation Rate:	Not applicable.
Boiling Point:	Not available.
pH:	Not available.
Solubility in Water:	Not available.
Coefficient of Water/Oil:	Not available.
Flash Point:	<14°C.

## Section 10. Stability and Reactivity

Reactivity:	Stable under normal conditions.
Stability:	Stable under normal conditions.
Conditions to Avoid:	Strong Oxidizer, Keep away from heat, flame, sparks, and other ignition sources.
Incompatibility:	Plastics, Strong oxidizing agents, strong acids, strong bases, aliphatic amines, nitrates.
Hazardous Products of Decomposition:	Acetic Acid; Carbon oxides.
Other Hazards:	<p>Reacts with considerable heat release with some curing agents. Heating this product above 300° F in the presence of air may cause slow oxidative decomposition; above 500° F polymerization may occur.</p> <p>Some combinations of resins and curing agents can produce exothermic reactions which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from the thermal and chemical decompositions vary widely in composition and toxicity.</p>

## Section 11. Toxicological Information

No data for product itself.

<b>Acute Toxicity:</b>	LD50			LC50	
	Oral	Rat		Inhalation	Rat
Benzyl Alcohol			1,230 mg/kg		>4.178 mg/L
	Dermal	Rabbit	2,000 mg/kg		
Isophorone Diamine	Oral	Rat	1,030 mg/kg		
Phenol,4-Nonyl-, Branched	Oral	Rat	1,300 mg/kg		
N-(aminoethyl)piperazine	Oral	Rat	> 1000 mg/kg		
	Dermal	Rabbit	866 mg/kg		
Diethylenetriamine	Oral	Rat	1,080 mg/kg		
	Dermal	Rabbit	675 mg/kg		
Tert-butyl acetate			Inhalation (Estimate)		11 mg/L

### Specific Target Organ Toxicity:

Benzyl Alcohol	Respiratory Tract Irritation. Narcotic Effects (single exposure). Central Nervous System (repeated exposure).
Isophorone Diamine	Respiratory Tract Irritation. Narcotic Effects (single exposure).
Amine-Epoxy Resin Adduct	Respiratory Tract Irritation. Narcotic Effects (single exposure). Skin. Respiratory Tract (repeated exposure).
Phenol,4-Nonyl-, Branched	Blood. Liver. Lungs (repeated exposure).
N-(aminoethyl)piperazine	Skin. Lungs (single exposure).
Diethylenetriamine	Eyes. Nervous System (single exposure). Kidneys. Skin. Lungs. Liver (repeated exposure).
Tert-butyl acetate	Respiratory Tract Irritation. Central Nervous System with Narcotic Effects (single exposure).

**Potential Acute Health Effects:**

Eye Contact:	Causes serious eye damage
Inhalation:	Causes central nervous system depression. May cause drowsiness and dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin Contact:	Causes severe burns. Harmful in contact with skin. May cause an allergic skin reaction.
Ingestion:	Harmful if swallowed. Can cause central nervous system depression. May cause burns to mouth, throat, and stomach.

**Symptoms related to the physical, chemical, and toxicological characteristics:**

Eye Contact:	Pain, watering, redness.
Inhalation:	Respiratory tract irritation, coughing, wheezing and breathing difficulties, asthma, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal malformations.
Skin Contact:	Pain or irritation, redness, blistering may occur, reduced fetal weight, increase in fetal deaths, skeletal malformations.
Ingestion:	Stomach pains, reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Potential Chronic Health Effects:**

General:	Causes damage to organs through prolonged or repeated exposure: once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	Suspected of damaging the unborn child.
Developmental Effects:	No known significant effects or critical hazards.
Fertility Effects:	Suspected of damaging fertility.

**Section 12. Ecological Information**

<b>Toxicity:</b>	No data for product itself.			
Benzyl Alcohol	Acute: Fish	96-hour	LC50	10,000 µg/L (fresh water)
Phenol,4-Nonyl-, Branched	Acute: Blue Gill	96-hour	LC50	135.1 µg/L (fresh water)
	Acute: Green Algae	72-hour	EC50	0.33 mg/L
	Acute: Green Algae	96-hour	EC50	0.41 mg/L
2- piperazine -l-ylethylamine	Acute: Fish	96-hour	LC50	2,190,000 µg/L (fresh water)
2,2'-iminodiethylamine	Acute: Daphnia	48-hour	LC50	16 mg/L
	Acute: Water Flea	48-hour	LC50	53,500 µg/L (fresh water)
	Acute: Green Algae	72-hour	EC50	1,164 mg/L
	Acute: Green Algae	96-hour	EC50	345,60 µg/L (fresh water)
Tert-butyl acetate	No data available.			

<b>Persistence/Degradability:</b>	Not available	
<b>Bioaccumulation Potential:</b>		
Benzyl Alcohol	LogPow	1.1
	BCF	-
	Potential	Low
Phenol,4-Nonyl-, Branched	LogPow	5.4
	BCF	2.4
	Potential	Low
N-(aminoethyl)piperazine	LogPow	-1.48
	BCF	-
	Potential	Low
Diethylenetriamine	LogPow	-1.3
	BCF	0.65 – 2.80
	Potential	Low

### Section 13. Disposal Considerations

Waste Disposal: The generation of waste should be avoided or minimized wherever possible. Disposal should be in accordance with federal, provincial and municipal regulations.

### Section 14. Transport Information

Canada: TDG: UN3469, PAINT, FLAMMABLE, CORROSIVE, CLASS 3 (SUBSIDIARY CLASS 8), PG II.

IATA: UN3469, PAINT, FLAMMABLE, CORROSIVE, CLASS 3 (SUBSIDIARY CLASS 8), PG II.

This product is classified as Class 3 based on results of lab testing.

### Section 15. Regulatory Information

Canada: DSL: All components listed or exempt

Canadian Lists:

NPRI: Listed: Phenol, 4-nonyl-, branched

CEPA Toxic Substances: Listed: Phenol, 4-nonyl-, branched

USA: TSCA: All components listed or exempt

### Section 16. Other Information

Revision Date: March 13, 2023

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