



# Material Safety Data Sheet

Material Name: ULTRABOND G21 - Part A

ID: SAH00171

## \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

Material Name: ULTRABOND G21 - Part A

### Product Use

Adhesive

### Manufacturer Information

USA and Puerto Rico

**MAPEI**

1144 East Newport Center Drive

Deerfield Beach, FL 33442

Phone: 1-954-246-8888

Canada

**MAPEI**

2900 Francis-Hughes Avenue

Laval, QC H7L 3J5

Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-631-996-6666

## \*\*\* Section 2 - Hazards Identification \*\*\*

### Emergency Overview

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is irritating to the eyes, respiratory system and skin. This product may be harmful or fatal if swallowed.

### Hazard Statements

CAUTION! Irritating to eyes, respiratory system and skin. May be harmful or fatal if swallowed. Vapor harmful.

Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

### Potential Health Effects: Eyes

This product is irritating to the eyes.

### Potential Health Effects: Skin

This product is irritating to the skin. Prolonged contact with this product may cause allergic skin sensitization reactions.

### Potential Health Effects: Ingestion

This product may be harmful or fatal if swallowed. Ingestion of this product may cause nausea, vomiting and diarrhea.

### Potential Health Effects: Inhalation

This product is irritating to the respiratory system.

### Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

### Potential Environmental Effects

None identified.

**HMIS Ratings: Health: 2 Fire: 0 Reactivity: 1 Pers. Prot.:** Safety glasses, gloves

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## \*\*\* Section 3 - Composition / Information on Ingredients \*\*\*

CAS #	Component	Percent
1317-65-3	Limestone	30-60
Proprietary	Alkyl phenol blocked polyisocyanate	10-30
103-23-1	Bis (2-ethylhexyl) adipate	3-7
471-34-1	Calcium carbonate	3-7

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25068-38-6	Epoxy Resin	5-10
2210-79-9	o-Cresylglycidyl ether	1-5
112-80-1	Oleic acid	0.1-1.0

## \*\*\* Section 4 - First Aid Measures \*\*\*

### First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

### First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

### First Aid: Ingestion

For ingestion, flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

### First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

### First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

## \*\*\* Section 5 - Fire Fighting Measures \*\*\*

### General Fire Hazards

See Section 9 for Flammability Properties.

This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.

### Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### Extinguishing Media

Dry chemical (preferred), foam, water.

### Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

**NFPA Ratings: Health: 2 Fire: 0 Reactivity: 1**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Personal Precautions

Wear appropriate protective equipment and clothing during clean-up.

### Containment Procedures

Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

### Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

### Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

### Evacuation Procedures

None identified.

### Special Procedures

Regulations vary. Consult local authorities before disposal.

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## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating. Keep out of the reach of children.

### Storage Procedures

Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Keep out of sun.

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### A: Component Exposure Limits

#### Limestone (1317-65-3)

OSHA (Final):	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)
NIOSH:	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)
Alberta:	10 mg/m <sup>3</sup> TWA
British Columbia:	10 mg/m <sup>3</sup> TWA (total dust); 3 mg/m <sup>3</sup> TWA (respirable fraction) 20 mg/m <sup>3</sup> STEL (total dust)
New Brunswick:	10 mg/m <sup>3</sup> TWA (particulate matter containing no asbestos and < 1% crystalline silica)
NW Territories:	5 mg/m <sup>3</sup> TWA (respirable mass); 10 mg/m <sup>3</sup> TWA (total mass)
Nunavut:	5 mg/m <sup>3</sup> TWA (respirable mass); 10 mg/m <sup>3</sup> TWA (total mass)
Quebec:	10 mg/m <sup>3</sup> TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)
Saskatchewan:	10 mg/m <sup>3</sup> TWA 20 mg/m <sup>3</sup> STEL
Yukon:	30 mppcf TWA; 10 mg/m <sup>3</sup> TWA 20 mg/m <sup>3</sup> STEL

#### Calcium carbonate (471-34-1)

NIOSH:	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)
Alberta:	10 mg/m <sup>3</sup> TWA
NW Territories:	5 mg/m <sup>3</sup> TWA (respirable mass); 10 mg/m <sup>3</sup> TWA (total mass)
Nunavut:	5 mg/m <sup>3</sup> TWA (respirable mass); 10 mg/m <sup>3</sup> TWA (total mass)
Quebec:	10 mg/m <sup>3</sup> TWAEV
Saskatchewan:	10 mg/m <sup>3</sup> TWA 20 mg/m <sup>3</sup> STEL
Yukon:	30 mppcf TWA; 10 mg/m <sup>3</sup> TWA 20 mg/m <sup>3</sup> STEL

### Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

### PERSONAL PROTECTIVE EQUIPMENT

#### Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields.

#### Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended.

#### Personal Protective Equipment: Respiratory

Not normally needed. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

#### Personal Protective Equipment: General

Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

# Material Safety Data Sheet

Material Name: ULTRABOND G21 - Part A

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## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

<b>Appearance:</b>	Beige paste	<b>Odor:</b>	Slight latex odor
<b>Physical State:</b>	Paste	<b>pH:</b>	N/A
<b>Vapor Pressure:</b>	N/A	<b>Vapor Density:</b>	>1.0
<b>Boiling Point:</b>	N/A	<b>Melting Point:</b>	N/A
<b>Solubility (H2O):</b>	Insoluble	<b>Specific Gravity:</b>	1.3 - 1.6
<b>Evaporation Rate:</b>	<1.0	<b>VOC:</b>	36 g/L (mixture)
<b>Octanol/H2O Coeff.:</b>	N/A	<b>Flash Point:</b>	>212° F (>100° C)
<b>Flash Point Method:</b>	CC	<b>Upper Flammability Limit (UFL):</b>	N/A
<b>Lower Flammability Limit (LFL):</b>	N/A	<b>Burning Rate:</b>	N/A
<b>Auto Ignition:</b>	N/A		

### Physical Properties: Additional Information

The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

### Chemical Stability

Stable under normal conditions.

### Chemical Stability: Conditions to Avoid

Do not freeze.

### Incompatibility

This product may react with strong acids, bases and oxidizing agents.

### Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

### Possibility of Hazardous Reactions

Will not occur.

## \*\*\* Section 11 - Toxicological Information \*\*\*

### Acute Dose Effects

#### A: General Product Information

No information available for the product.

#### B: Component Analysis - LD50/LC50

##### Bis (2-ethylhexyl) adipate (103-23-1)

Oral LD50 Rat: 5600 mg/kg; Dermal LD50 Rabbit: 8410 mg/kg

##### Calcium carbonate (471-34-1)

Oral LD50 Rat: 6450 mg/kg

##### Epoxy Resin (25068-38-6)

Oral LD50 Rat: 11400 mg/kg

##### o-Cresylglycidyl ether (2210-79-9)

Inhalation LC50 Rat: 6090 mg/m<sup>3</sup>/4H; Oral LD50 Rat: 4 g/kg

##### Oleic acid (112-80-1)

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Material Name: ULTRABOND G21 - Part A

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Oral LD50 Rat: 25 g/kg

## Carcinogenicity

### A: General Product Information

No information available for the product.

### B: Component Carcinogenicity

#### Bis (2-ethylhexyl) adipate (103-23-1)

IARC: Monograph 77 [2000]; Supplement 7 [1987] (Group 3 (not classifiable))

## Sensitization

No information available for the product.

## \*\*\* Section 12 - Ecological Information \*\*\*

## Ecotoxicity

### A: General Product Information

No information available for the product.

### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

#### Bis (2-ethylhexyl) adipate (103-23-1)

Test & Species		Conditions
96 Hr LC50 Salmo gairdneri	54-150 mg/L	[static]
96 Hr LC50 Lepomis macrochirus	0.48-0.85 mg/L	[static]
96 Hr LC50 Oncorhynchus mykiss	0.48-0.85 mg/L	[static]
96 Hr LC50 Pimephales promelas	0.48-0.85 mg/L	[static]
72 Hr EC50 Scenedesmus subspicatus	>500 mg/L	

#### Oleic acid (112-80-1)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	205 mg/L	[static]

## \*\*\* Section 13 - Disposal Considerations \*\*\*

## US EPA Waste Number & Descriptions

### A: General Product Information

No additional information available.

### B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

## Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

## \*\*\* Section 14 - Transportation Information \*\*\*

## International Transportation Regulations

Not regulated as dangerous goods.

## \*\*\* Section 15 - Regulatory Information \*\*\*

## US Federal Regulations

### A: General Product Information

All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

### B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

# Material Safety Data Sheet

Material Name: ULTRABOND G21 - Part A

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## State Regulations

### A: General Product Information

Other state regulations may apply. Check individual state requirements.

### B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Limestone	1317-65-3	No	Yes	Yes	Yes	Yes	Yes
Bis (2-ethylhexyl) adipate	103-23-1	Yes	Yes	No	Yes	Yes	No
Oleic acid	112-80-1	No	No	No	No	Yes	Yes

## Canadian WHMIS Information

### A: General Product Information



### B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Bis (2-ethylhexyl) adipate	103-23-1	0.1 %
Oleic acid	112-80-1	1 %

## Additional Regulatory Information

### A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

### B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Limestone	1317-65-3	Yes	NDSL	EINECS
Bis (2-ethylhexyl) adipate	103-23-1	Yes	DSL	EINECS
Calcium carbonate	471-34-1	Yes	DSL	EINECS
Epoxy Resin	25068-38-6	Yes	DSL	No
o-Cresylglycidyl ether	2210-79-9	Yes	DSL	EINECS
Oleic acid	112-80-1	Yes	DSL	EINECS

## \* \* \* Section 16 - Other Information \* \* \*

### Reference Version (internal)

O1-2111-05

### Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

### Key/Legend

NA = Not available or Not Applicable. ACGIH = American Conference of Governmental Industrial Hygienists. NFPA = National Fire Protection Association. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

**Contact:** Product Safety Specialist

**Contact Phone:** 1-954-246-8888

End of Sheet SAH00171



# Material Safety Data Sheet

Material Name: ULTRABOND G21 - Part B

ID: SAH00172

## \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

Material Name: ULTRABOND G21 - Part B

### Product Use

Adhesive

### Manufacturer Information

USA and Puerto Rico

**MAPEI**

1144 East Newport Center Drive

Deerfield Beach, FL 33442

Phone: 1-954-246-8888

Canada

**MAPEI**

2900 Francis-Hughes Avenue

Laval, QC H7L 3J5

Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-631-996-6666

## \*\*\* Section 2 - Hazards Identification \*\*\*

### Emergency Overview

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). Contact with this material will cause irritation and burns to the skin and eyes. May cause sensitization by skin contact.

### Hazard Statements

DANGER! CORROSIVE. ALLERGEN. Causes burns to the skin and eyes. May cause sensitization by skin contact. Irritating to eyes. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

### Potential Health Effects: Eyes

This product is severely irritating to the eyes and may cause eye burns.

### Potential Health Effects: Skin

This product is severely irritating to the skin and may cause burns. Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction.

### Potential Health Effects: Ingestion

Ingestion of this product may cause nausea, vomiting and diarrhea.

### Potential Health Effects: Inhalation

This product is irritating to the respiratory system.

### Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

### Potential Environmental Effects

None identified.

**HMIS Ratings: Health: 3 Fire: 1 Reactivity: 1 Pers. Prot.:** Safety glasses, gloves, synthetic apron, vapor respirator if airborne concentrations exceed exposure limits

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## \*\*\* Section 3 - Composition / Information on Ingredients \*\*\*

CAS #	Component	Percent
140-31-8	1-(2-Aminoethyl) piperazine	60-100
84852-15-3	4-Nonylphenol, branched	10-30

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68410-23-1	Fatty acids, C18-unsaturated, dimers, reaction products with Polyethylenepolyamines	7-13
90-72-2	2,4,6-Tri(dimethylaminomethyl)phenol	1-5
112-24-3	Triethylene tetramine	0.5-1.5

## \*\*\* Section 4 - First Aid Measures \*\*\*

### First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

### First Aid: Skin

For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

### First Aid: Ingestion

For ingestion, flush out mouth with water. Get medical attention or advice. Do not induce vomiting.

### First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

### First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

## \*\*\* Section 5 - Fire Fighting Measures \*\*\*

### General Fire Hazards

See Section 9 for Flammability Properties.

This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.

### Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### Extinguishing Media

Dry chemical (preferred), foam, water.

### Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

**NFPA Ratings: Health: 3 Fire: 1 Reactivity: 0 Other: 1**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Containment Procedures

Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

### Personal Precautions

Wear appropriate protective equipment and clothing during clean-up.

### Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

### Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

### Evacuation Procedures

None identified.

### Special Procedures

Regulations vary. Consult local authorities before disposal.



# Material Safety Data Sheet

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## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating. Keep out of the reach of children.

### Storage Procedures

Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Store away from strong oxidizers.

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### A: Component Exposure Limits

#### Triethylene tetramine (112-24-3)

Ontario:	0.5 ppm TWAEV; 3 mg/m <sup>3</sup> TWAEV Absorption through skin, eyes, or mucous membranes
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### Engineering Controls

Use general ventilation.

### PERSONAL PROTECTIVE EQUIPMENT

#### Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields.

#### Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended.

#### Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

#### Personal Protective Equipment: General

Laundry contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

<b>Appearance:</b>	Beige paste	<b>Odor:</b>	Slight latex odor
<b>Physical State:</b>	Paste	<b>pH:</b>	N/A
<b>Vapor Pressure:</b>	N/A	<b>Vapor Density:</b>	>1.0
<b>Boiling Point:</b>	N/A	<b>Melting Point:</b>	N/A
<b>Solubility (H<sub>2</sub>O):</b>	Insoluble	<b>Specific Gravity:</b>	1.0 - 1.3
<b>Evaporation Rate:</b>	<1.0	<b>VOC:</b>	36 g/L (mixture)
<b>Octanol/H<sub>2</sub>O Coeff.:</b>	N/A	<b>Flash Point:</b>	>212° F (>100° C)
<b>Flash Point Method:</b>	CC	<b>Upper Flammability Limit (UFL):</b>	N/A
<b>Lower Flammability Limit (LFL):</b>	N/A	<b>Burning Rate:</b>	N/A
<b>Auto Ignition:</b>	N/A		

### Physical Properties: Additional Information

The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

### Chemical Stability

Stable under normal conditions.

### Chemical Stability: Conditions to Avoid

Do not freeze.

### Incompatibility

This product may react with strong acids, bases and oxidizing agents.

# Material Safety Data Sheet

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## Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

## Possibility of Hazardous Reactions

Will not occur.

## \* \* \* Section 11 - Toxicological Information \* \* \*

### Acute Dose Effects

#### A: General Product Information

No information available for the product.

#### B: Component Analysis - LD50/LC50

##### 1-(2-Aminoethyl) piperazine (140-31-8)

Oral LD50 Rat: 2140 mg/kg; Dermal LD50 Rabbit:880 mg/kg

##### 4-Nonylphenol, branched (84852-15-3)

Oral LD50 Rat: 580 mg/kg; Dermal LD50 Rabbit:2031 mg/kg

##### 2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)

Oral LD50 Rat: 1000 mg/kg; Dermal LD50 Rat:1280 mg/kg

##### Triethylene tetramine (112-24-3)

Oral LD50 Rat: 2500 mg/kg; Dermal LD50 Rabbit:550 mg/kg

### Carcinogenicity

#### A: General Product Information

No information available for the product.

#### B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

### Sensitization

This product may be sensitizing by prolonged skin contact.

## \* \* \* Section 12 - Ecological Information \* \* \*

### Ecotoxicity

#### A: General Product Information

No information available for the product.

#### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

##### 1-(2-Aminoethyl) piperazine (140-31-8)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	1950-2460 mg/L	[flow-through]
96 Hr LC50 Poecilia reticulata	>1000 mg/L	[semi-static]
96 Hr LC50 Oncorhynchus mykiss	>=100 mg/L	[semi-static]
72 Hr EC50 Selenastrum capricornutum	495 mg/L	
48 Hr EC50 Daphnia magna	32 mg/L	

##### 4-Nonylphenol, branched (84852-15-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	0.135 mg/L	[flow-through]
96 Hr EC50 Selenastrum capricornutum	0.41 mg/L	
48 Hr EC50 Daphnia magna	0.140 mg/L	

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## Triethylene tetramine (112-24-3)

Test & Species		Conditions
96 Hr LC50 Poecilia reticulata	570 mg/L	[semi-static]
96 Hr LC50 Pimephales promelas	495 mg/L	
72 Hr EC50 Scenedesmus subspicatus	2.5 mg/L	
72 Hr EC50 Selenastrum capricornutum	20 mg/L	
48 Hr EC50 Daphnia magna	31.1 mg/L	

### \*\*\* Section 13 - Disposal Considerations \*\*\*

#### US EPA Waste Number & Descriptions

##### A: General Product Information

No additional information available.

##### B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

##### Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### \*\*\* Section 14 - Transportation Information \*\*\*

#### US DOT Information

**Shipping Name:** Corrosive liquids, n.o.s. ( 1-(2-Aminoethyl) piperazine , 4-Nonylphenol, branched , 2,4,6-Tri(dimethylaminomethyl)phenol )

**UN/NA #:** UN1760 **Hazard Class:** 8 **Packing Group:** III

#### IATA Information

**Shipping Name:** Corrosive liquid, n.o.s. ( 1-(2-Aminoethyl) piperazine , 4-Nonylphenol, branched , 2,4,6-Tri(dimethylaminomethyl)phenol )

**UN #:** UN1760 **Hazard Class:** 8 **Packing Group:** III

#### TDG Information

**Shipping Name:** Corrosive liquid, n.o.s. ( 1-(2-Aminoethyl) piperazine , 4-Nonylphenol, branched , 2,4,6-Tri(dimethylaminomethyl)phenol )

**UN/NA #:** UN1760 **Hazard Class:** 8 **Packing Group:** III

### \*\*\* Section 15 - Regulatory Information \*\*\*

#### US Federal Regulations

##### A: General Product Information

All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

##### B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

##### C: Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS #	
4-Nonylphenol, branched	84852-15-3	DOT regulated marine pollutant

#### State Regulations

##### A: General Product Information

Other state regulations may apply. Check individual state requirements.

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## B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
1-(2-Aminoethyl) piperazine	140-31-8	No	Yes	No	Yes	Yes	No
Triethylene tetramine	112-24-3	No	Yes	No	Yes	Yes	No

## Canadian WHMIS Information

### A: General Product Information



### B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
1-(2-Aminoethyl) piperazine	140-31-8	1 %
Triethylene tetramine	112-24-3	0.1 %

## Additional Regulatory Information

### A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

### B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
1-(2-Aminoethyl) piperazine	140-31-8	Yes	DSL	EINECS
4-Nonylphenol, branched	84852-15-3	Yes	DSL	EINECS
Fatty acids, C18-unsaturated, dimers, reaction products with Polyethylenepolyamines	68410-23-1	Yes	DSL	No
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	Yes	DSL	EINECS
Triethylene tetramine	112-24-3	Yes	DSL	EINECS

## \*\*\* Section 16 - Other Information \*\*\*

### Reference Version (internal)

O1-2112-01

### Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

### Key/Legend

NA = Not available or Not Applicable. ACGIH = American Conference of Governmental Industrial Hygienists. NFPA = National Fire Protection Association. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

**Contact:** Product Safety Specialist

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