

Disclaimer: The information in this SDS relates to the product named and is based upon information Epoxy International considers to be accurate. No warranty expressed or implied is intended. This information is offered exclusively for your consideration and interpretation. The Corporate Safety and Environmental Affairs Department is responsible for the preparation of this Safety Data Sheet.

Safety Data Sheet

Epoxy International

FDA-BOND 16 RESIN**SDS Number:** FDA16-R**SDS Date:** 09/27/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name: FDA-BOND 16 (Resin)
SDS number: FDA16-R
Product type: Resin
Chemical family: Epoxy resin
Company Address: Epoxy International
200 Allens Ave,
Providence, RI 02903
Email: info@epoxyinternational.com
Emergency Contact Number : (888) 522-6742
Fax: (877) 522-6742
Chemtrec (Domestic): (800) 424-9300
Chemtrec (International): (703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

Form: Viscous Liquid
OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200)

Emergency overview: WARNING!
CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HEAD MATERIAL CAN CAUSE THERMAL BURNS.

Potential acute health effects:

Inhalation: Slightly irritating to the respiratory system.
Ingestion: Not expected to be harmful under normal conditions of use.
Skin: Irritating to skin. May cause sensitization by skin contact material. Can cause thermal burns.
Eyes: Irritating to eyes. Heated material can cause thermal burns.

Potential chronic health effects:

Chronic effects: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.
Target organs: Review section 2 and 11 for any additional assessments.

Over-exposure signs/symptoms

Inhalation: Adverse symptoms may include the following respiratory tract irritation coughing.
Skin: Adverse symptoms may include the following: irritation and or redness
Eyes: Adverse symptoms may include the following: pain and or irritation, watering and redness.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Ingredient's name	CAS NUMBER	% BY WEIGHT
Bisphenol A-(Epichlorohydrin)	25068-38-6	>50
Alkylglycidyl ethers C12 & C14	68609-97-2	1 - 5

**Any applicable Canadian trade secret numbers will be listed in section 15.

SECTION 4: FIRST AID MEASURES

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

Skin contact: Flush contaminated skin with a plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wears gloves, continue to rinse for at least 10 minutes. In the event of any complains or symptoms, avoid further exposure. Wash clothing before reuse. For contact with hot product flush contaminated skin with large amounts of cold water to dissipate heat. Gear with clean cotton sheeting or gauze. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion: Wash out mouth with water. Remove dentures if any. Move person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting is dangerous. Do not induce vomiting unless directed to do so medical personnel. If vomiting occurs, the head should be kept low that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of First Aid personnel: In the event of body contact. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Notes to physician: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: In a fire or if heated, a pressure increase will occur and the container may burst.

EXTINGUISHING MEDIA

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: N/A

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous Combustion Products: Decomposition products may include the following materials: carbon oxides.

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

SECTION 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

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

Large spill: Stop leak if without risk. Move containers from spill area. For molten material, allow the product to cool and solidify. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Small spill Use an extinguishing agent suitable for the surrounding fire.

*For safety and environmental precautions, please review entire SDS for necessary information.

SECTION 7: HANDLING AND STORAGE

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 processes. Workers should wash hands and face before eating, drinking or smoking. Persons with history of skin sensitization problems should not be employed in any process in

which this product is used. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

Storage: Store in accordance with local regulations. 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 prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Note: This resin may be handled, shipped and stored at elevated temperature in bulk.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURES LIMITS

Ventilation:	Use only with adequate ventilation. If user operations generate dust, fumes gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Eyes:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Clothing measures:	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn.
HYGIENE 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 workstation location.
Respiratory measures:	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 products of the safe working limits of the selected respirator.
Recommended monitoring procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION:

PHYSICAL FORM:

Liquid

COLOR:

Amber

ODOR:

Mild

BOILING POINT:

>176°C

FLASH POINT:

>93°C

SOLUBILITY IN WATER:	Insoluble
SPECIFIC GRAVITY (WATER=1) :	1.2
VAPOR PRESSURE:	< 1 mm Hg 20 C
VAPOR DENSITY (AIR = 1) :	>1.0
VOLATILES:	Negligible
	Low

SECTION 10: STABILITY AND REACTIVITY

Stability:	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Materials to avoid:	Reactive or incompatible with the following materials: Oxidizers, Acids, Amines
Conditions to avoid:	Strong oxidizer.
Hazardous decompositions products:	Decomposition products may include the following materials: Carbon Oxides.
Hazardous polymerization conditions:	CONDITIONS Heat may cause hazardous polymerization.
Reactivity:	Stable under normal conditions
Other hazards:	Reacts with considerable heat release with some curing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Ingredient name

LD50 Oral	Rat	30,000 mg/kg
LD50 Dermal	Rat	> 2,000 mg/kg

Other Toxicological Information

Carcinogenicity

Classification

Ingredient name

ACGIH	Not classified
IARC	Not classified
NTP	Not listed
OSHA	Not classified

SECTION 12: ECOLOGICAL INFORMATION

Environmental effects

No known significant effects or critical hazards.

Other adverse effects

No known significant effects or critical hazards.

SECTION 13: DISPOSAL INFORMATION

Waste disposal: The generations of waste should be avoided or minimize 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. Avoid dispersal of spilled and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International Transport Regulations

Regulatory Information	UN/NA Number	Proper shipping name	Classes/Packaging Group	Reportable Quantity (RQ)
CFR	non-regulated	non-regulated	non-regulated	non-regulated
IATA (Cargo)	non-regulated	non-regulated	non-regulated	non-regulated
TDG	non-regulated	non-regulated	non-regulated	non-regulated
IMO/IMDG	non-regulated	non-regulated	non-regulated	non-regulated

SECTION 15: REGULATORY INFORMATION

US Regulation:

HCS Irritating materials, sensitizing material

Classification:

Canada Class D-2B: Material causing other toxic effects (Toxic).

(WHMIS): **Canada lists:** Canadian NPRI: None Required

China (IECSC) On the IECSC inventory

US Federal Regulations **SARA 311/312** classification immediate (acute) health hazard.

SARA 313 – Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of Title 3 of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
None required.

SARA 302 Extremely Hazardous Substances None Required

State Regulation **Massachusetts RTK Substances**

None Required

New Jersey RTK Substances

None Required

Pennsylvania RTK Hazardous Substances

None Required

California Prop. 65

WARNING: This Product contains a chemical know to the state of California to cause cancer. Oxirane. (Phenoxymethyl) –122-60-1

International Regulations **Europe inventory**

all components are listed or exempted.

Australia inventory (AICS)

all components are listed or exempted.

Epoxy International

Email: info@epoxyinternational.com

China inventory (IECSC)	all components are listed or exempted.
Korea inventory (KECI)	all components are listed or exempted.
Philippines inventory (PICCS)	all components are listed or exempted.
Japan inventory (ENCS)	all components are listed or exempted.
Canada inventory	all components are listed or exempted.
United States inventory (TSCA 8b)	all components are listed or exempted.
New Zealand inventory (NZIoC)	Not determined.

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm. Unless a concentration is specified in Section 2 of the SDS, the below chemical/s are present in trace amounts.

Component	CAS Number
None reportable	N/A

SECTION 16: REGULATORY INFORMATION

HMIS® Hazard Ratings

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'.

* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

Health

2

Flammability

1

Physical Hazard

0

Notice to reader:

The information provided herein was believed by Epoxy International to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply suitability of the product for its intended use. All products supplied by Epoxy International are subject to Epoxy International' terms and conditions of sale. EPOXY INTERNATIONAL MAKES NO WARRANTY, EXPRESSED OR FOR ANY PURPOSE OF CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY EPOXY INTERNATIONAL, except that the product shall conform to Epoxy International specifications. Nothing contained herein constitutes an offer for the sale of any product.

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Safety Data Sheet

Epoxy International

FDA-BOND 16 HARDENER

SDS Number: FDA16-H

SDS Date: 10/16/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name: FDA-BOND 16 (HARDENER)
SDS number: FDA16-H
Product type: HARDENER
Chemical family: Epoxy HARDENER
Company Address: Epoxy International
410 South Main St
Providence, RI 02903
Email: info@epoxyinternational.com
Emergency Contact Number : (888) 522-6742
Fax: (877) 522-6742
Chemtrec (Domestic): (800) 424-9300
Chemtrec (International): (703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

Form: Viscous Liquid

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200)

Emergency overview: WARNING!
CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HEAD MATERIAL CAN CAUSE THERMAL BURNS.

Potential acute health effects:

Inhalation:	Slightly irritating to the nose and to the respiratory system.
Ingestion:	Will cause irritation of mouth, throat, and stomach.
Skin:	Irritating to skin. May cause sensitization by skin contact material. Can cause thermal burns.
Eyes:	Irritating to eyes. Heated material can cause thermal burns. Risk of serious damage to eyes. Excessive tear formation
<u>Potential chronic health effects:</u>	
Chronic effects:	Contains material that can cause target organ damage.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	Contains material which may cause birth defects, based on animal data.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Target organs:	Contains material which causes damage to the following organs: Kidneys, Lungs. Review Section 2 and 11 for any additional assessments.
<u>Over-exposure signs/symptoms</u>	
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation coughing. Wheezing and breathing difficulties, asthma.
Ingestion:	Adverse symptoms may include the following: nausea, vomiting and diarrhea.
Skin:	Adverse symptoms may include the following: irritation and or redness
Eyes:	Adverse symptoms may include the following: pain and or irritation, watering and redness.
Medical Conditions aggravated By over-exposure	Pre-existing respiratory and skin disorders and disorders involving any other target organs mentioned in this SDS as being at risk may be aggravated by over-exposure to this product.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Ingredient's name	CAS NUMBER	% BY WEIGHT
Diethylenetriamine	111-40-0	10 – 20
Polyethylenepolyamine, dimer fatty acid condensate	68410-23-1	>50
Triethylenetetramine	112-24-3	5 - 10

**Any applicable Canadian trade secret numbers will be listed in section 15.

SECTION 4: FIRST AID MEASURES

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

Chemical burns must be treated promptly by a physician.

Skin contact:	Flush contaminated skin with a plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wears gloves, continue to rinse for at least 10 minutes. In the event of any complains or symptoms, avoid further exposure. Wash clothing before reuse. For contact with hot product flush contaminated skin with large amounts of cold water to dissipate heat. Gear with clean cotton sheeting or gauze. Get medical attention immediately.
Inhalation:	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion:	Wash out mouth with water. Remove dentures if any. Move person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting is dangerous. Do not induce vomiting unless directed to do so medical personnel. If vomiting occurs, the head should be kept low that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of First Aid personnel:	In the event of body contact. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Notes to physician:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposure person may need to be kept under medical surveillance for 48 hours.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: In a fire or if heated, a pressure increase will occur and the container may burst.

EXTINGUISHING MEDIA

Suitable:	Use an extinguishing agent suitable for the surrounding fire.
Not suitable:	N/A
Special exposure hazards:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous Combustion Products:	Decomposition products may include the following materials: carbon oxides.
Special protective equipment:	Fire-fighters should wear appropriate protective equip self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill:	Stop leak if without risk. Move containers from spill area. For molten material, allow the product to cool and solidify. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Small spill:	Use an extinguishing agent suitable for the surrounding fire.

*For safety and environmental precautions, please review entire SDS for necessary information.

SECTION 7: HANDLING AND STORAGE

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 processes. Workers should wash hands and face before eating, drinking or smoking. Persons with history of skin sensitization problems should not be employed in any process in which this product is used. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.
Storage:	Store in accordance with local regulations. 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 prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Note: This HARDENER may be handled, shipped and stored at elevated temperature in bulk.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURES LIMITS

Ventilation:	Use only with adequate ventilation. If user operations generate dust, fumes gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Eyes:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Clothing measures:	Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn.
HYGIENE 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 workstation location.
Respiratory measures:	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 products of the safe working limits of the selected respirator.
Recommended monitoring procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION:

PHYSICAL FORM	Liquid
COLOR	Colorless
ODOR	Ammoniacal
BOILING POINT:	>198°C, >390°F
FLASH POINT:	>101°C, 215 °F
SOLUBILITY IN WATER:	soluble
SPECIFIC GRAVITY (WATER=1):	1.0
VAPOR PRESSURE:	0.08 mm Hg
VAPOR DENSITY (AIR = 1):	3.6
PERCENT VOLATILES:	None

SECTION 10: STABILITY AND REACTIVITY

Stability:	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Materials to avoid:	Reactive or incompatible with the following materials: Oxidizers, Acids, Amines
Conditions to avoid:	Strong oxidizer.
Hazardous decomposition products:	Decomposition products may include the following materials: Carbon Oxides.
Hazardous polymerization conditions:	CONDITIONS Heat may cause hazardous polymerization.
Reactivity:	Stable under normal conditions

Other hazard: Reacts with considerable heat release with some curing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

CARCINOGEN Regulation	IARC (group)	NTP	OSHA Substance Specific
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There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use

CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

TARGET ORGANS	Eyes; Skin; Respiratory system; Gastrointestinal
RESPIRATORY SENSITIZATION	Sensitizer. May cause allergic reaction.
SKIN SENSITIZATION	Sensitizer. May cause allergic reaction.

Ingredient name	Oral toxicity	NOTES ON ORAL TOXICITY
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Polyethylenepolyamine, dimer fatty acid condensate	Oral LD50: Rat > 8 g/kg	irritant and may cause nausea and vomiting
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Diethylenetriamine	Oral LD50: Rat 1080 mg/kg	Slightly toxic. Corrosive to mouth, throat and stomach.
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Triethylenetetramine	Oral LD50: Rat :4340 mg/kg	Slightly toxic. Corrosive to mouth, throat and stomach.
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Oral LD50: Rabbit: 5500 mg/kg
Oral LD50: Mouse 1600 mg/kg

DERMAL TOXICITY

Ingredient name	Dermal toxicity	NOTES ON
Polyethylenepolyamine, Dimer fatty acid condensate	cause	Severely irritating; may cause permanent skin damage

Diethylenetriamine	Dermal LD50: Rabbit: 1090 mg/kg	Corrosive cause permanent skin damage. Can be absorbed through skin causing systemic toxic effects. Repeated and/or prolonged contact may cause skin sensitization.
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Dermal LD50: Rat: 672 – 1240 Mg/kg

Triethylenetetramine

Dermal LD50: Rabbit 800 mg/kg
Skin

Corrosive. Slightly toxic.
sensitizer

Other Toxicological Information**Ingredient name****Inhalation Toxicity****NOTES ON INHALATION****TOXICITY**

Diethylenetriamine

Inhalation LC50 (4hr): Rat 0.07

Highly toxic. Extremely severe irritant/corrosive. May cause severe burns which could lead to permanent damage to respiratory system. Possible respiratory sensitizer

Polyethylenepolyamine, dimer fatty acid condensate

Vapor or aerosol, if generated, can cause irritation of the eyes, nose and respiratory tract. Avoid breathing vapors or mists. Exposure to high concentrations may produce lung damage.

Triethylenetetramine

Respiratory irritant. Possible respiratory sensitizer.

Ingredient name

Diethylenetriamine

NOTES ON EYE IRRITATION

Extremely severe irritant/corrosive. May cause severe burns which could lead to permanent damage or total loss

of vision

Triethylenetetramine

Corrosive.

Polyethylenepolyamine, dimer fatty acid condensate

Severe/very severe irritant. The vapor and the liquid may cause burning, intense irritation and excessive watering of the eye.

SECTION 12: ECOLOGICAL INFORMATION**Environmental effects**

Potential effect on environment

Do not allow entering drains, sewers or watercourses. Mobility
Slightly soluble

Potential to bioaccumulation

No known significant effects or critical hazards

Other adverse effects

None

Epoxy International

Email: info@epoxyinternational.com

SECTION 13: DISPOSAL INFORMATION

Waste disposal: The generations of waste should be avoided or minimize 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. Avoid dispersal of spilled and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International Transport Regulations

<i>Regulatory Information</i>	<i>UN/NA Number</i>	<i>Proper shipping name</i>	<i>Classes/Packaging Group</i>	<i>Reportable Quantity (RQ)</i>
CFR	non-regulated	non-regulated	non-regulated	non-regulated
IATA (Cargo)	non-regulated	non-regulated	non-regulated	non-regulated
TDG	non-regulated	non-regulated	non-regulated	non-regulated
IMO/IMDG	non-regulated	non-regulated	non-regulated	non-regulated

SECTION 15: REGULATORY INFORMATION

US Regulations

HCS Classification:	Irritating materials, sensitizing material	
Canada (WHMIS):	Class D-2B: Material causing other toxic effects (Toxic). Canada lists: Canadian NPRI: None Required	
China (IECSC)	On the IECSC inventory	
US Federal Regulations	SARA 311/312 classification immediate (acute) health hazard. SARA 313 – Supplier Notification This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of Title 3 of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372. None required. SARA 302 Extremely Hazardous Substances None Required	
State Regulation	Massachusetts RTK Substances New Jersey RTK Substances Pennsylvania RTK Hazardous Substances California Prop. 65	None Required None Required None Required WARNING: This Product contains a chemical know to the state of California to cause cancer. Oxirane. (Phenoxymethyl) –122-60-1
International Regulations	Europe inventory Australia inventory (AICS) China inventory (IECSC) Korea inventory (KECI) Philippines inventory (PICCS) Japan inventory (ENCS)	all components are listed or exempted. all components are listed or exempted. all components are listed or exempted. all components are listed or exempted. all components are listed or exempted. all components are listed or exempted.

Canada inventory	all components are listed or exempted.
United States inventory (TSCA 8b)	all components are listed or exempted.
New Zealand inventory (NZIoC)	Not determined.

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm. Unless a concentration is specified in Section 2 of the SDS, the below chemical/s are present in trace amounts.

Component	CAS Number
None reportable	N/A

SECTION 16: REGULATORY INFORMATION

HMIS® Hazard Ratings

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'.

* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

Health	Flammability	Physical Hazard
3*	1	0

Notice to reader:

The information provided herein was believed by Epoxy International to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply suitability of the product for its intended use. All products supplied by Epoxy International are subject to Epoxy International' terms and conditions of sale. EPOXY INTERNATIONAL MAKES NO WARRANTY, EXPRESSED OR FOR ANY PURPOSE OF CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY EPOXY INTERNATIONAL, except that the product shall conform to Epoxy International specifications. Nothing contained herein constitutes an offer for the sale of any product.