

Safety Data Sheet

Revision Date: 01-06-2016
Product Code: 70715

1. IDENTIFICATION

Product Name	EPOXY RESIN HARDENER
Product Code	70715
Document ID	G70715
Revision Number	1
Prior Version Date	None
Intended Use	Epoxy Coating Polyamide Co-Reactant
Restrictions On Use	For Industrial Use Only
Chemical Family	Epoxy Hardener
Chemical Manufacturer / Importer	NEOGARD® - a Division of JONES-BLAIR® Company, LLC 2728 Empire Central Dallas, TX 75235 1-214-353-1600
Emergency Telephone Number:	ChemTrec Center 1-800-424-9300 International: 703-527-3887

2. HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

Hazard Pictograms



GHS Classification

Skin Corrosion/Irritation Category 1A
Serious Eye Damage/Eye Irritation Category 1
Skin Sensitisation Category 1
Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1
Reproductive Toxicity Category 2
Acute Toxicity - Inhalation Dust / Mist Category 4
Acute Toxicity - Dermal Category 4
Acute Toxicity - Oral Category 4

Signal Word

Danger

Hazard Statements

Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, mist, vapours or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection and face protection. Use personal protective

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equipment as required.

Response IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Immediately call a POISON CENTER or physician. Get medical attention if you feel unwell. Rinse mouth. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards Not Otherwise Classified (HNOC) Not applicable

Additional Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Component</u>	<u>CAS #</u>	<u>%</u>
Benzyl alcohol	100-51-6	15 - 40
3-amino methyl-3,5,5 Trimethyl Amine	2855-13-2	10 - 30
Polyoxypropylenediamine	9046-10-0	7 - 13
Modified Polyamidoamine	68605-86-7	7 - 13
Bisphenol-A-diglycidylether	25068-38-6	1 - 5
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	1 - 5
Salicyclic acid	69-72-7	1 - 5
Bisphenol A	80-05-7	0.5 - 1.5
Diethylenetriamine	111-40-0	0.5 - 1.5
Triethylenetetramine	112-24-3	0.5 - 1.5

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Eye Contact Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. This corrosive material can cause immediate and permanent eye damage. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

Skin Contact Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists. Thoroughly wash or discard clothing and shoes before reuse.

Ingestion Corrosive. Do not induce vomiting! Drink one glass of water followed by milk if available. Seek medical attention immediately and give the medical care provider with

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this MSDS. Never give anything by mouth to an unconscious person.

Most Important Acute Symptoms and Effects Not Available

Most Important Delayed Symptoms and Effects Not Available

Special treatment needed: Pre-existing disorders of the following organs may be aggravated by exposure to this material: skin, lung (for example, asthma-like symptoms)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Unsuitable Extinguishing Media No data available

Fire and/or Explosion Hazards Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire. Container may explode in heat of fire.

Hazardous Combustion Products Carbon dioxide, Carbon monoxide, Nitrogen containing gases, Ammonia, Phenol

Special Protective Equipment and Precautions for Fire-Fighters Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section VIII of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Methods and Material for Containment and Cleaning Up Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Dike with suitable absorbent material. Gather and store in a sealed container pending disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wash thoroughly after handling. Do not get in eyes, on skin and clothing. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse.

Conditions for Safe Storage Store in a cool dry place. Keep container(s) closed.
Materials to Avoid/Chemical Incompatibility Acids, Aluminum alloys, Oxidizing agents, Isocyanates, Anhydrides, Lead acetate, Iron Salts, Iodine, Spirit nitrous ether, Acrylates, Aldehydes, Alcohols, Halogenated Hydrocarbons, Ketones, Nitrites

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

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<u>Chemical Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH STEL</u>
Salicyclic acid	5mg/m ³ (respirable); 15mg/m ³ (total dust)	3mg/m ³ (respirable)	
Diethylenetriamine		1ppm, 4.2mg/m ³ TWA	

Appropriate Engineering Controls	Local exhaust ventilation or other engineering controls may be required when handling or using this product to avoid overexposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Facilities storing or using this material should be equipped with an eyewash and safety shower.
Respiratory Protection	General or local exhaust ventilation is the preferred means of protection. In cases where ventilation is inadequate, respiratory protection may be required to avoid overexposure. Follow respirator manufacturer's directions for respirator use.
Eye Protection	Wear chemical splash goggles when handling this product. Additionally, wear a face shield when the possibility of splashing of liquid exists. Do not wear contact lenses. Have an eye wash station available.
Skin Protection	Avoid all skin contact by covering as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Clothing suitable to prevent skin contact.
General Hygiene Conditions	As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wash thoroughly after handling. Do not get in eyes, on skin and clothing. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid
Color	Colorless
Odor	Aromatic, Ammonia Like
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point (°F/°C)	No data available / No data available
Initial Boiling Point and Boiling Range	
Low (°F)	392.0
High (°F)	476.6
Flash Point (°F/°C)	205 / 96
Evaporation Rate	> 1.00 Ethyl Ether
Flammability (solid, gas)	No data available
Upper Flammable/Explosive Limit	5.0
Lower Flammable/Explosive Limit	0.7
Vapor Pressure	1.00
Vapor Density	0.95
Relative Density	1.009
Solubility in Water	Low; 10-39%
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature:	No data available
Viscosity	150 - 300 CPS
Volatiles, % by volume	0.00
Volatiles, % by weight	0.00
Volatile Organic Chemicals (g/L)	
(Regulatory, Calculated)	0.00
(Actual, Calculated)	0.00
Density	8.32 - 8.52 lbs./Gal

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10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Contamination. High humidity,
Incompatible Materials	Acids, Aluminum alloys, Oxidizing agents, Isocyanates, Anhydrides, Lead acetate, Iron Salts, Iodine, Spirit nitrous ether, Acrylates, Aldehydes, Alcohols, Halogenated Hydrocarbons, Ketones, Nitrites
Hazardous Decomposition Products	Carbon dioxide, Carbon monoxide, Nitrogen containing gases, Ammonia, Phenol, Ammonia, Ethylenediamine, Amines

11. TOXICOLOGICAL INFORMATION

Routes of Exposure	Inhalation Skin absorption Ingestion Eye contact Skin contact
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Immediate (Acute) Health Effects by Route of Exposure

Inhalation Irritation	Can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Causes nose and throat irritation. Causes lung irritation. Irritating to the nose, throat, and respiratory tract. May cause respiratory tract irritation.
Inhalation Toxicity	May cause allergic respiratory reaction.
Skin Contact	Corrosive to skin tissue. Can cause chemical burns. Causes skin burns. Sensitizer. Avoid exposure. If sensitized, repeated exposures will result in irritation, reddening, and rashes even for very low exposures. May cause allergic skin reaction.
Skin Absorption	May be harmful if absorbed through skin. Contains a substance which may result in absorption of harmful amounts upon prolonged or widespread contact.
Eye Contact	Corrosive to eye tissue. Can cause severe irritation, tearing, and burns that can quickly lead to permanent injury including blindness. Can cause substantial irritation.
Ingestion Irritation	Severely irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.
Ingestion Toxicity	Harmful if swallowed. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Long-Term (Chronic) Health Effects

Inhalation	Upon prolonged and/or repeated exposure, can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Overexposure may cause lung damage. Prolonged and continuous exposure to an excessive concentration has been shown to affect respiratory function. This effect may be severe. Overexposure may cause respiratory tract damage.
Skin Contact	Upon prolonged or repeated contact, corrosive to skin tissue. Can cause chemical burns. Prolonged contact may cause an allergic skin reaction.
Skin Absorption	Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage.

Product Toxicology Data

Component Toxicology Data

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Chemical Component	Oral LD50	Dermal LD50	Inhalation LC50
Benzyl alcohol	Oral LD50 Rat 1360 mg/kg	Dermal LD50 Rabbit 2000 mg/kg	Inhalation LC50 (8h) Rat 1,000.00 ppm
3-amino methyl-3,5,5 Trimethyl Amine	Oral LD50 Rat 1030 mg/kg	Dermal LD50 Rat > 2000 mg/kg	Inhalation LC50 (4h) Rat > 5.01 mg/L
Polyoxypropylenediamine	Oral LD50 Rat 1100 mg/kg	Dermal LD50 Rabbit 1550 mg/kg	
Bisphenol-A-diglycidylether	Oral LD50 Rat > 15,000 mg/kg	Dermal LD50 Rabbit 23,000 mg/kg	
2,4,6-Tri(dimethylaminomethyl)phenol	Oral LD50 1200 mg/kg	Dermal LD50 1280 mg/kg	
Salicyclic acid	Oral LD50 Rat 891 mg/kg Oral LD50 Mouse 480 mg/kg Oral LD50 Rabbit 1300 mg/kg	Dermal LD50 Rabbit > 10,000 mg/kg Dermal LD50 Rat > 2000 mg/kg	
Bisphenol A	Oral LD50 Rat 3250 mg/kg	Dermal LD50 Rabbit 3000 mg/kg	
Diethylenetriamine	Oral LD50 Rat 1080 mg/kg	Dermal LD50 Rabbit 1090 mg/kg	Inhalation LC50 (4h) Rat 0.30 mg/L

Carcinogen Information

Chemical Name	IARC Carcinogen	OSHA Carcinogen	NTP Carcinogen
Not applicable			

12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available)	No data available Components of this product are hazardous to wildlife and aquatic life.
Mobility in soil	No data available

13. DISPOSAL CONSIDERATIONS

Safe Handling of Waste Refer to other sections of this SDS to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information and does not contain all regulatory transportation details. Refer to all applicable regulations for domestic, international, air, vessel and ground transportation requirements and restrictions.

DOT Basic Description: Paint Related Material
Hazard Class: 8
UN Number: UN3066
Packing Group: III
Other: This product qualifies for a limited quantity exception per CFR173.154(b)(2) for inner containers <= 1.3 gallon (5L) net capacity for liquids and packed in strong outer packagings.

IATA Air Shipping Name: Paint Related Material
IATA Hazard Class: 8
IATA UN Number: UN3066
IATA Packing Group: III

IMO Shipping Name: Paint Related Material

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IMO Hazard Class: 8
IMO UN Number: UN3066
IMO Packing Group: III

Marine Pollutant: N

15. REGULATORY INFORMATION

TSCA Status All components of this product are either listed on the TSCA Inventory; or, are not subject to the inventory notification requirements.

Regulated Components

SARA EHS Chemicals

	<u>CAS #</u>	<u>%</u>
Epichlorohydrin	106-89-8	< 0.1 ppm

CERCLA

Not applicable

SARA 313

	<u>CAS #</u>	<u>%</u>
4,4'-Isopropylidenediphenol	80-05-7	0.5 - 1.5

SARA 311/312

Health (Acute):	Y
Health (chronic):	Y
Fire (Flammable):	N
Pressure:	N
Reactivity:	N

U. S. State Regulations:

California Prop 65 Chemicals

Cancer

	<u>CAS #</u>	<u>%</u>
Phenyl glycidyl ether	122-60-1	< 1 ppm
1-Chloro-2,3-epoxypropane	106-89-8	< 0.1 ppm

Reproductive

Bisphenol A	80-05-7	0.5 - 1.5
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Canadian Regulations:

CEPA DSL: The components of this product ARE listed on the Canadian Domestic Substances List.

WHMIS Hazard Class: D2A E

16. OTHER INFORMATION

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Disclaimer This SDS has been prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada's Controlled Product Regulations (CPR). To the best of our knowledge the information contained herein is accurate. Determination of safe handling, application and use of this material is the responsibility of the end user. This information is furnished without warranty, expressed or implied.