

SAFETY DATA SHEET

Date Prepared: 7/1/2014

Date Modified: 00/00/0000

Date Printed: 5/25/2017

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MATERIAL IDENTITY:

Novoxy CHM 4 N
Epoxy Resin

INFORMATION TELEPHONE:

920-803-1700

COMPANY:

Andara LLC
3687 Enterprise Drive
Sheboygan, WI 53083

EMERGENCY TELEPHONE:

CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

GENERAL HAZARD STATEMENT

Exposure to this material will cause moderate eye irritation and may cause an allergic reaction. Contains crystalline silica exposure to dust silica dust is a respiratory irritant and possible carcinogen.

EMERGENCY OVERVIEW

OSHA HAZARDOUS

Skin Sensitizer, Irritant, Respiratory Irritant, Carcinogen

Target Organs: Skin, Eyes, Respiratory

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental		Physical
Skin Irritation	Category 2	Acute Aquatic Toxicity	Category 2	Not Classified
Eye Irritation	Category 2A	Chronic Aquatic Toxicity	Category 2	
Skin Sensitization	Category 1			
Carcinogenic	Category 1A			
STOT RE 1	Category 1A			
STOT SE 3	Category 3			

Pictogram:



Signal Word

Danger

Hazard Statements	Precautionary Statements
H315 Causes Skin Irritation	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
H317 May cause allergic skin reaction	P260 Do not breathe dust.
H319 Causes serious eye irritation	H372 Causes damage to lungs through prolonged of repeated exposure
H335 May causes respiratory irritation	P264 Wash skin thoroughly after handling.
H350 May cause cancer (Inhalation)	P273 Avoid release to the environment.
H372 Causes damage to organs through prolonged or repeated exposure	P280 Wear protective gloves/protective clothing/eye protection/face protection.
H411 Toxic to aquatic life with long lasting effects	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P304+P340 IF INHALED EYES: Remove person to fresh air and keep comfortable for breathing. cautiously with water for several minutes

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Potential Health Effects

- Inhalation** Unlikely except at highly elevated temperatures due to low vapor pressure. May cause an allergic reaction. Prolonged contact with dust containing crystalline silica may cause mechanical irritation. Chronic exposures to dust may cause cancer.
- Skin** Possible skin irritant and sensitizer.
- Eyes** Will cause moderate eye irritation.
- Ingestion** Irritating to mouth, throat and stomach

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization:

Ingredient(s)	CAS Number	% (by weight)
Bisphenol A Epoxy	25068-38-6	25 – 85%
1,4-Butandiol diglycidyl ether	2425-79-8	15 – 75 %
Crystalline Silica	14808-60-7	30 – 60%
Epoxy Resin	68475-94-5	1 – 5%
Trichloro (N,N-dimethyloctylamine) boron	34762-90-8	1 – 5%

4. FIRST AID MEASURES

Eyes Contact: Flush with water immediately. Continue to flush for 10 minutes and obtain emergency medical attention.

Skin Contact: Remove and do not reuse contaminated clothing. Wash exposed areas thoroughly with soap and water and flush for ten minutes. It is not recommended to remove resin from skin with solvents. Solvents only increase contact and dry the skin. Consult a physician.

Ingestion: Washout mouth with water. If the person is conscious, give small amounts of water. Never give anything by mouth to an unconscious person. Get medical attention if adverse health effects persist or are severe.

Inhalation: Remove to fresh air. If breathing is labored, administer oxygen. Give artificial respiration if not breathing. Get medical attention.

Advice to physicians: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Conditions of Flammability

Combustible liquid.

Suitable extinguishing media

Foam, water fog, dry chemical – carbon dioxide preferred

Hazardous Decomposition Products

Fumes, carbon dioxide, carbon monoxide, acrid smoke, phenolics, aldehydes.

Fire Fighting Instructions

Use self-contained positive pressure NIOSH approved breathing apparatus and impervious turn out gear. In a fire or if heated, a pressure increase will occur and the container may burst.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Remove all possible sources of ignition or polymerization. Promptly isolate the scene from the vicinity. Do not touch or walk through the spilled material. Avoid breathing vapor or mist. No action shall be taken without suitable training. Equip personnel with proper protection.

Environmental Precautions

Prevent runoff from entering drains, sewers, or streams. This material is toxic to aquatic life. Inform authorities if the product has caused environmental pollution. Dispose/report per regulatory requirements.

Methods and Materials for Containment and Cleaning Up

Spilled or released material may polymerize or ignite. Eliminate all ignition sources and ventilate area. Do not let product enter sewers. Dike and recover large spills. Use absorbent to soak up remainder liquid. May be covered with foam or water fog if danger of ignition exists. Dispose/report per regulatory requirements.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin, eyes and clothing. Avoid inhalation of vapors. Wash thoroughly after handling.

Conditions for Safe Storage

Keep in closed or covered containers when not in use. Store in cool dry place with adequate ventilation. Do not store near heat or open flames.

Decontamination Procedures

Follow standard plant procedures or supervisor's instructions for decontamination operations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	PEL	STEL	TLV	Other
Bisphenol A Epoxy	NE	NE	NE	NE
1,4-Butandiol diglycidyl ether	NE	NE	NE	NE
Crystalline Silica	2 mg/m ³ See formula for SiO ₂	NE	ACGIH TWA 0.025 mg/m ³	NE
Epoxy Resin	NE	NE	NE	NE
Trichloro (N,N-dimethyloctylamine)	NE	NE	NE	NE

Engineering Controls

Use and store only with adequate ventilation or use respiratory protection.

Respiratory Protections

Where exposure through inhalation may occur from use, NIOSH/MSHA approved respiratory protection equipment is recommended.

Eye Protection

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection

Do not allow any skin contact. If potential for skin contact is present, impervious clothing and nitrile gloves should be worn. Neoprene coated fabric is recommended for this application.

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Other hygienic practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Other work practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	viscous liquid
Color	Clear to pale yellow
pH	N/DA
Melting/Freezing Temperature	N/DA
Boiling Point	>200 C/392 F
Flash Point	>121 C/250 F
Ignition Temperature	N/DA
Autoignition Temperature	N/DA
Lower explosive limit N/AP	Upper explosive limit N/AP
Vapor Pressure	0.03 mbar at 77 C/171 F
Vapor Density (air=1)	>1
Specific Gravity (water=1 @39.2F)	1.68
Solubility	Negligible
Viscosity, Kinematic	6,500 – 7,500 cps at 25 C
Percent Volatiles	Negligible
Evaporation Rate (Bac=1)	N/DA
Odor	Slight aromatic
Odor threshold	N/DA

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage conditions.
Will autopolymerize at very high temperatures.

Possibility of Hazardous Reactions

No data available.

Conditions to Avoid

High heat, amines, strong oxidizers, acids and bases.

Materials to Avoid

Strong acids (organic/inorganic), strong oxidizing agents and bases.

Hazardous Decomposition Products

Fumes, carbon dioxide, carbon monoxide, acrid smoke, phenolics, aldehydes.

11. TOXICOLOGY INFORMATION

Acute Toxicity

Bisphenol A-epoxy resin

Oral LD50	Rat	>2,000 mg/kg.
Inhalation LC50	Rat	0.00001 ppm 5 hours

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Dermal LD50 Rabbit >2,000 mg/kg

Butanediol diglycidyl ether

Oral LD50 Rat 1,163mg/kg.

Dermal LD50 Rabbit >2,150 mg/kg

ARALDITE AW 2104

Oral LD50 Rat >5,000 mg/kg.

Skin Corrosion/Irritation

No data available

Serious Eye Damage/Eye Irritation

No data available

Respiratory or Skin Sensitization

Guinea pig (skin) Sensitizing

Mutagenicity

No known significant effects

Teratogenicity

No known significant effects

Reproductive Toxicity

No known significant effects

Carcinogenicity

IARC: Crystalline silica is a Group 1 carcinogen.

ACGIH: Crystalline silica (cristobalite, tridymite, quartz) is a ACGIH A2 carcinogen.

NTP: Crystalline silica is a known human carcinogen.

12. ECOLOGICAL INFORMATION

Keep out of ground and surface waters.

Aquatic Ecotoxicity

Bisphenol A-Epoxy Resin

EC50 9.4 mg/l Algae Static Test 72 hours

EC50 1.7 mg/l Daphnia Static Test 48 hours

LC50 1.5 mg/l Fish Static Test 96 hours

Butanediol diglycidyl ether

EC50 75 mg/l Daphnia Static Test 24 hours

EL50 >160 mg/l Algae Static Test 72 hours

LC50 24 mg/l Fish Static Test 96 hours

Bacteria Toxicity

Bisphenol A-Epoxy Resin

IC50 >100 mg/l Bacteria Static Test 3 hours

Butanediol diglycidyl ether

IC50 >100 mg/l Bacteria Static Test 3 hours

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Biodegradability

Not readily biodegradable

Mobility in soil

No data available. Do not allow to enter soil, waterways or wastewater.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Remove contaminated materials for disposal at a permitted facility using registered transporters. Dilute aqueous waste is biodegradable. Incineration is the preferred method of disposal.

14. TRANSPORTATION INFORMATION

DOT (US)

Non-Regulated

IMDG

Non-Regulated

IATA

Non-Regulated

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

OSHA HAZARDS

Target Organ Effect: Skin Sensitizer, Eye and Skin Irritant

HMIS Classification

Health Hazard;	2
Flammability	1
Physical Hazards	0

NFPA Rating

2
1
0

SARA TITLE III: Section 311/312 Hazard Class

Immediate Acute Health Hazard
Chronic Health Hazard

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product contains crystalline silica. Airborne particles of respirable size crystalline silica are known to the state of California to cause cancer and/or reproductive toxicity.

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16. OTHER INFORMATION

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).