

# Safety Data Sheet

# AR- 100 LV- EPOXY - PART A

### **SECTION I: IDENTIFICATION**

Product Name: AR-100 LV- Part A

Product Use: **Epoxy** Resin

Emergency Telephone Number: I-800-535-5053

Hazard Pictograms:

### SECTION II: HAZARD IDENTIFICATION

Signal Word: WARNING Hazard Classification:

Health:

Skin Irritation, Category 2 Eye Irritation, Category 2B Skin Sensitization, Category IB

**Hazard Statements:** 

H315 + H320: Causes skin and eye irritation. H317: May cause an allergic skin reaction.

### **Precautionary Statements:**

**Prevention:** 

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P361+P364: Take off immediately all contaminated clothing and wash it before reuse.

P264: Wash ... thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** 

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy

to do. Continue rinsing.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P337+P313: If eye irritation persists: Get medical advice/attention.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international

regulations.

### POTENTIAL HEALTH EFFECTS

EYES: Contact causes eye irritation. SKIN: Contact can cause skin irritation.

# **ECTION III: Composition/Information on Ingredients**

Mixture	CAS No.	Percentage %
Oxirane, 2,2'-[(I-methylethylidene)bis(4,I-	25085-99-8	50-100%
phenyleneoxymethylene)]bis-, Homopolymer		
Alkyl glycidyl ether	068609-97-2	1-25%



# Safety Data Sheet

### **SECTION IV – FIRST AID MEASURES**

**General Information:** Remove person from affected area and make comfortable. Treat symptomatically. **After inhalation:** Remove to fresh air. If breathing difficulties continue, **Get Medical Help**.

After skin contact: Wash thoroughly with soap and water. Remove and launder contaminated clothing before reuse.

After eye contact: Immediately flush with water thoroughly for 15 minutes, lifting both eyelids. Get Medical Help.

**After ingestion:** Do Not Induce Vomiting. Give 3-4- glasses of water, if person conscious. **Get Immediate Medical Help.** 

### SECTION V - FIRE AND EXPLOSION HAZARD DATA

**EXTINGUISHING MEDIA:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire exinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

**HAZARDOUS COMBUSTION PRODUCTS:** During a fire, smoke may contain the original material in addition to combustion products of vaying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.

FIRE FIGHTING PROCEDURES: Keep people away to cool exposed containers and fire affected zone unil fire it and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of the

**FIRE FIGHTING EQUIPMENT:** Firefighters should be equipped with self-contained breathing apparatus with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing.

### SECTION VI – ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Wear protective equipment (See section VIII). Keep unprotected persons away.

Methods and material for containment and cleaning up:

**Spill Response:** Keep out of irrigation ditches and sewers. Absorb on dry media and store in a sealable container. Remove residual material with hot soapy water.

Waste Disposal: Dispose of in a hazardous waste facility according to local and federal regulations. Environmental precautions: Keep out of drainage ditches and all waterways.





### SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid releases to the environment.

HANDLING: Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash

thoroughly after handing. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8 for additional information.

STORAGE: Keep container closed when not in use.

STORAGE TEMPERATURE: 2°C (36°F) Minimum to 43°C (109°F) Maximum

SHELF LIFE: 24 months.

### SECTION VIII – EXPOSURE CONTROL MEASURES

ENGINEERING CONTROLS: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the work area. Adequate ventilation should be provided so that exposure limits are not exceeded.

# PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical safety glasses with side shields conforming to EN166.

SKIN: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl

#### rubber.

Ethylene vinyl alcohol laminate (EVAL). Nitrile/butadiene rubber (nitrile or NBR). Neoprene. Polyvinyl chloride (PVC or Vinyl). NOTICE: The selection of a specific glove fopr a particular application and duration of use in a workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructructions/specifications provided by the glove supplier.

RESPIRATORY: If risk assessment indicates that respiratory protection is needed: use a full-face respirator with

multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means o protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

PROTECTIVE CLOTHING: Use clothing necessary to prevent repeated or prolonged contact.





### SECTION IX – PHYSICAL/CHEMICAL CHARACTERISTICS

Form: Visuous liquid **Appearance** 

Color: White to pale straw color.

Odor: Mild

pH-value: Not determined

**Boiling Point/Boiling** 320°C Differential scanning calorimeter

Range: Freezing Point: No data available

Flash Point: 264°C (507°F) to 268°C (514°F) Closed Cup

Vapor Pressure: Not Determined. No data available Density: **Explosion limits:** No data available

### **SECTION X – REACTIVITY DATA**

**REACTIVITY:** No data available

**HAZARDOUS POLYMERIZATION:** None under normal processing. **STABILITY:** Stable under normal conditions of use and storage.

**CONDITIONS TO AVOID:** Avoid short term exposure to temperatures above 300C, Potenially violent decomposition

can occur above 350C. Avoid prolonged exposure temperatures above 250C. Generation of gas during

decomposition can cause pressure in closed systems. Pressure build-up can be rapid.

POSSIBILITY OF HAZARDOUS REACTIONS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Gases are released during decomposition. Uncontrolled

exothermic reaction of

epoxy resins release phenolics, carbon monoxide, and water.

**INCOMPATIBLE MATERIALS:** Avoid strong acids, bases, and oxidizing agents. Avoid contact with amines.

### SECTION XI – TOXICOLOGICAL INFORMATION

DERMAL LD<sub>50</sub>: 23000 mg/kg rabbit **ACUTE TOXICITY** 

ORAL LD<sub>50</sub>: > 15000 mg/kg Rat

INHALATION LC<sub>50</sub>: Not Determined.

SKIN CORROSION/IRRITATION: Prolonged or repeated contact with skin may cause irritation with local redness.

SERIOUS EYE DAMAGE/IRRITATION: May cause eye irritation but corneal injury is unlikely.

RESPIRATORY OR SKIN SENSITISATION: Similar materials have caused allergic skin reactions in humans and

have demonstrated the potential for contact allergy in mice

GERM CELL MUTAGENICITY: The product or a component may be mutagenic, the data is inconclusive

CARCINOGENICITY

IARC: Not listed or regulated by IARC (Group 1 or 2)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or

anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**REPRODUCTIVE TOXICITY:** In animal studies, did not interfere with reproduction. **ASPIRATION HAZARD:** Based on physical properties, not likely to be an aspiration hazard.





### SECTION XII - ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Material is moderately toxic to aquatic organisms on an acute basis.

**BIOACCUMULATION/ACCUMULATION:** Based on stringent OECD test guidlines, this material cannot be cosidered as readily biodegradable; however, thes results do not necessarily mean that the material is not biodegradable under environmental conditions.

**AQUATIC TOXICITY (ACUTE)** 

**96-HOUR LC**<sub>50</sub>: 2 mg/l Onorhynchus mykiss **48-HOUR EC**<sub>50</sub>: 1.8 mg/l Daphnia magna

### **SECTION XIII - DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous wasterior to disposal. Furthermore, consult with all applicable local and state waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

FOR LARGE SPILLS: Do not allow product to reach waterways or storm sewers.

**PRODUCT DISPOSAL:** All recovered material should be packaged, labeled, transported and disposed or reclaimed in conformance with applicable law and regulations

**EMPTY CONTAINER:** Follow all SDS/label precautions even after container is emptied because it may retain product residues. Do not pressurize, cut, weld,braze, solder, drill, grind, or expose containers to heat, flame, sparks, static electricity, or sources of ignition.

### SECTION XIV - TRANSPORT INFORMATION

**UN Proper Shipping Name: DOT**-Not regulated as hazardous material for transportation.

### AIR (IC AO/I ATA)/VESSEL (IMO/IMDG)

Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (epoxy

resin)

UN/NA Number: UN3082

Primary Hazard Class/Division: 9
Packing Group: |||

### **SECTION XV - OTHER REGULATORY INFORMATION**

NFPA Ratings (Scale 0-4)



# **SECTION XVI - OTHER INFORMATION**

Last Updated: 6/1/2019

**NOTE:** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. End of SDS.





# AR-100 LV- EPOXY - PART B

# **SECTION I: IDENTIFICATION**

Emergency Telephone Number: I-800-535-5053 Telephone Number for Information: 706-253-5055

Product Name: AR-100 LV- Part B

Product Use: Epoxy Resin

### SECTION II: HAZARD IDENTIFICATION

# Signal Word: DANGER Hazard Classification:

Acute Toxicty, Oral, Catagory 4
Serious Eye Damage, Category I
Skin Corrosion, Catagory IB
Skin Sensitization, Catagory I
Acute hazards to the Aquatic Environment, Category 3 Chronic
Hazards to the Aquatic Environment, Category 3

### Hazard Statements:

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H412:- Harmful to aquatic life with long lasting effects.

### **Precautionary Statements:**

### PREVENTION:

P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

P352 – Wash with plenty of water/...

P270 – Do no eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well ventilated area.

P272 – Contaminated work clothing should not be allowed out of the workplace.

P273 – Avoid release to the environment.

### **RESPONSE:**

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P312 - Call a POISON CENTER/doctor/...if you feel unwell.

P301 +P330 + P331 – IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing Rinse skin with water/shower.

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfor table for breathing.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.

P308+P311- If exposed or concerned: Call a POISON CENTER/doctor/...

P322 \_ Specific measure (see...on this label)

P363 – Wash contaminated clothing before reuse.

### STORAGE/DISPOSAL:

P403+P233 - Store in well ventilate place. Keep container tightly closed.

P405 – Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant.











### **SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name:	CAS No.	Percentage %
Benzyl Alcohol	100-51-6	35-45%
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	35-45%
Cyclohexanemeth anamine, 5-amino-1,3,3-trimethyl-,reaction products with	68609-08-5	15-40%
bisphenol A diglycidyl ether homopolymer		

# **SECTION IV – FIRST AID MEASURES**

**EYES:** Flush eyes immediately with plenty water thoroughly for at least 15 minutes, lifting both eyelids. Get Medical HELP.

**SKIN:** Immediately flush with water for at least 15 minuteS. Remove contaminated clothing and footwear while flushing skin with water. Launder clothing and dispose of footwear. Seek medical attention.

**INGESTION:** Do Not Induce Vomiting. Rinse mouth with water. Call a physician or poison control center immediately.

**INHALATION:** Get immediated medical attention. Take precautions to ensure your own safety. Remove fom area of exposure. If unconcious, give oxygen. Give artificial respiration if not breathing. Avoid mouth to mouth contact by using a barrier device. If the heart has stopped start cardiopulmonary resuscitation (CPR)

### SIGNS AND SYMPTOMS OF OVEREXPOSURE:

**Acute Effects:** Harmful if swallowed. Harmful if inhaled. Causes severe burns and eye damage. May cause an allergic reaction.

### SECTION V - FIRE FIGHTING MEASUREHTING MEASURES

General Hazard: Thermal decomposition can lead to release of irritating gases and vapors Suitable Extinguishing Media: Alcolhol resistant foam, water spray, CO<sub>2</sub>, dry powder Unsuitable Extinguishing Media: Water jet.

**Special Remarks and Advice for Firefighters:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.





### SECTION VI – ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Absorb with non-combustible liquid binding material (sand, diatomaceous earth (clay), acid binders, universal binders.

LARGE SPILL: Wear appropriate personal protective equipment. Contain spill and pump into suitable disposal container.

### **ENVIRONMENTAL PRECAUTIONS:**

WATER SPILL: Do not allow to enter drains or waterways.

LAND SPILL: Should not be released into the environment.

**GENERAL PROCEDURES:** Ensure adequate ventilation. Ensure air handling systems are operational. All cleanup materials should be removed and placed in appropriate containers, labeld and stored in a safe place prior to proper treatment or disposal

### SECTION VII - HANDLING AND STORAGE

**GENERAL PROCEDURES:** Avoid releases to the environment.

Handling: Use with adequate ventilation. Use personal protective equipment.

Storage: Store in a cool, well-ventilated area. Protect from freezing and physical damage. Keep

container tightly sealed. Hold bulk storage under nitrogen blanket

Storage Temperature: Normal temperature and conditions of warehousing.

### **SECTION VIII – EXPOSURE CONTROL MEASURES**

**Engineering Controls:** Control Parameter:

100-51-6,Benzyl Alcohol, WEEL TWA 10.0ppm

Provide exhaust ventilation or other controls to keep the airborne concentrations of vapor or mist below the applicable workspace exposure limits (Occupational Exposure Limits (OEL indicated above)

### Personal Protective Equipment:







**SKIN:** Protective Gloves

EYE: Wear chemical splash goggles and face shield

**RESPIRATORY:** A NIOSH/MSHA approved air supplied respirator is advised in

absence of environmental control.

PROTECTIVE CLOTHING: Permeation resistant clothing and foot protection

WORK HYGIENIC PRACTICES: Employees should wash their hands and face before

eating, drinking or using tobacco products.

OTHER PRECAUTIONS: Properly maintain a safety shower and eyewash facility in the work area



### SECTION IX – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State: Liquid

Color:

Odor:

PH-value:

Boiling Point/Boiling Range:

Freezing Point:

Light yellow

Ammonia -like

>No data available

>205°C (401°F)

No data available

Flash Point And Method: 96C (203F)
Flammable Limits 1.3% to 13%

Auto Igniting: Product is not self-igniting.

Vapor Pressure:No data availableVapor Density:No data availableViscosity:No data availableSolubility in water:Fully MiscibleEvaporation Rate:No data availableFlammability:Non-FlammableThermal Decomposition:No data available

### **SECTION X – REACTIVITY DATA**

Conditions to be avoided: None known

**Incompatible materials:** Strong oxidizers, Alkalis, Peroxides and other radical forming substances **Hazardous Decomposition Products:** Combustion may produce oxides of carbon and nitrogen.

**Reactivity:** Stable under recommended storage conditions. **Stability:** Stable under normal conditions of use and storage.

Possibility of Hazardous Reactions: None known. Hazard Polymerization: None under normal processing

### SECTION XI – TOXICOLOGICAL INFORMATION

Acute toxicity: Oral: Benzyl Alcohol: LD50 - Rat 1230 mg.kg

Likely Route of Exposure: Skin. Exposure Symptoms:

**Eyes:** Severe irritation, burns and blindness.

Skin: Harmful, causes skin burns.

Inhalation: Harmful. May cause delayed lung injury. Ingestion:

Severe mouth, throat, stomach and esophagus burns.

Effects (Short-term, Long-term):

Immediate: Skin and eye contact.

**Delayed:** Ingestion.

Chronic: NE Carcinogenicity: No.

**Sensitization:** May cause skin sensitization.



### **SECTION XII - ECOLOGICAL INFORMATION**

**Aquatic toxicity:**Cyclohexanemeth anamine, 5-amino-1,3,3-trimethyl- Aquatic invertebrates, LC50-Daphnia magna (water flea) 17.4 mg/L

Persistence and Degradability: No further relevant information available.

Behavior in Environmental Systems: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

### SECTION XIII - DISPOSAL CONSIDERATIONS

**Recommendation:** Dispose of according to local, state and federal regulations.

Additional Information: Refer to Section 8

### SECTION XIV – TRANSPORT INFORMATION

UN-Number: 2735

**UN Proper Shipping** Amines, Liquid, Corrosive, N.O.S. (Isophorone Diamine)

Name: Transport Hazard 8
Class: Packing Group:



Limited Quantity: 5L

# **SECTION XV - OTHER REGULATORY INFORMATION**

NFPA Ratings (Scale 0-4)





## **SECTION XVI - OTHER INFORMATION**

Last Updated: 6/1/2019

**NOTE:** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. End of SDS.