

1. PRODUCT IDENTIFICATION

Trade Name: Araldite LY 556

Chemical Family: Epoxide

Health	2
Flammability	1
Reactivity	0
Protective Equipment	X

HMIS RATING

Intended Use or Product Type: Liquid Resin

2. COMPOSITION / INFORMATION ON INGREDIENTS

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				CARCINOGEN STATUS			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Bisphenol A Diglycidyl Ether Polymer	NE	NE	NE	NE	NE	NR	NR	NR
	Common Name:									

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning ! Causes allergic skin reactions. May cause irritation.

Primary Route(s) of Entry: Dermal.

4. FIRST AID MEASURES

Ingestion: If swallowed, give at least 3-4 glasses of water but do not induce vomiting. If vomiting occurs, give water again. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention. Have physician determine whether vomiting or stomach evacuation is necessary.

Effective Date: 11/29/00

Skin: For skin contact, wash with large amounts of running water, and soap, if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Discard or decontaminate clothing before re-use and destroy contaminated shoes.

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes: For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get immediate medical attention.

Overexposure Effects: Irritation, sensitization and dermatitis.

Medical Conditions Aggravated by Exposure: Allergy, eczema or skin conditions.

Additional Information: Promptly remove wet contaminated non-impervious clothing. Wash before reuse.

5. FIRE FIGHTING MEASURES

Flash Point: > 200°C (> 392 °F)

Flash Point Method Used: Closed Cup

Fire Fighting Extinguishing Media: Carbon dioxide, foam, dry chemical, water spray.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Avoid all personal contact. Take up with absorbent material. Shovel into closable containers. Flush contaminated area with water.

7. HANDLING AND STORAGE

Precautions: Avoid contact with eyes, skin and clothing. Avoid breathing vapor, mist or spray. Use only with good ventilation. Promptly remove wet contaminated non-impervious clothing and wash before reuse. Destroy contaminated leather and absorbent shoes. Individuals should wash thoroughly after handling. For industrial use only.

Storage Information: Store in cool, dry area in sealed containers. Keep containers closed to prevent moisture absorption and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Wear appropriate equipment to prevent eye or skin contact. Use of barrier cream recommended.

Skin Protection: Wear impervious gloves.

Effective Date: 11/29/00

Respiratory Protection: Organic chemical cartridge respirator, if needed.**Eye Protection:** Wear splash-proof chemical goggles.**Engineering Controls:** Good general mechanical ventilation and local exhaust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Clear
Odor:	Slight
Physical State:	Liquid
Solubility in Water:	Insoluble
Vapor Pressure:	< 0.01 Pa at 20°C (68 °F)
Specific Gravity:	1.15 - 1.2 at 25°C (77 °F)
Boiling Point:	> 200°C (> 392 °F)
Decomposition Temperature:	> 200°C (> 392 °F)

Percent Volatile: Nil.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Avoid strong acids or bases in bulk and elevated temperatures.**Stability:** Stable.**Incompatibility:** Strong oxidizing agents.**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, aldehydes.**Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): (Rat) > 5,000 mg/kg.**Acute Dermal Toxicity (LD50):** (Rabbit) > 6000 mg/kg.**Sensitization:** Moderate sensitizer.**Skin Irritation:** (Rabbit) Moderate irritation.**Eye Irritation:** (Rabbit) Slight irritation.**Teratogenicity:** (Rat, Rabbit) No adverse effects on embryonic or fetal development were observed.**Mutagenicity:**

Ames Tests: both positive and negative results

Hamster Bone Marrow Cytogenetics (in vivo): negative

Mouse Spermatocytes Cytogenetics (in vivo): negative

Micronucleus Test (in vivo): negative

Effective Date: 11/29/00

Mouse Dominant Lethal Test: negative
Alkylation of DNA: positive
Human Mononucleated WBC (in vitro): negative
Host Mediated Assay: negative

Sub-Chronic: (Rat) No observable effect at highest level studied (1000 mg/kg/day for 28 days) in oral feeding study.

Chronic Skin Exposure Effects:

2-Year Dermal Study in Mice: no treatment related effects
2-Year Skin Painting Studies:
A) C3HF/BD Mice: no increased tumor incidence
B) C57BL/6BD Mice: slight increase in epidermal localized carcinomas at high dose
C) C3H Mice: no tumors

Mice receiving skin applications of the Diglycidyl Ether of Bisphenol A or essentially identical resins for two years have yielded very limited evidence of weak carcinogenicity. The published report on this study concludes that this resin product "is not a systemic carcinogen when applied to the skin of CF-1 mice" and the tumor data "was of no biological importance". Based on all available data, IARC (International Agency for Research on Cancer) has concluded in 1988 that DGEBA is not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

Biodegradability: (Modified Sturm method): ~12%

Fish Toxicity:

Rainbow Trout (96hr.): LC50 1.5 mg/l.
Zebra Fish (96hr.): LC50 2.4 mg/l.

Invertebrate Toxicity: Daphnia Toxicity (24 hr.): EC50 3.6 mg/l.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

Department of Transportation: Not regulated.

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

Effective Date: 11/29/00

SARA Title III: Section 304 - CERCLA: Not listed.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain a toxic chemical for routine annual 'Toxic Chemical Release Reporting' under Sec. 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status: Chemical components listed on TSCA Inventory.

TSCA Section 12(b) - Export Notification: This product contains chemical(s) which is (are) regulated by TSCA 12(b) Regulation and it is required that proper export notification shall be sent to EPA prior to shipping out of the United States of America.

CAS Number: 1675-54-3

Chemical Name: Bisphenol A Diglycidyl Ether

International Regulations:

Canadian Inventory Status: All components included on the Domestic Substances List (DSL).

State Regulations:

Pennsylvania Right-to-Know: The following is required composition information:

CAS Number: 25068-38-6

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane

Common Name: Bisphenol A Epoxy Resin

Comment: Not on Pennsylvania Hazardous Substance List.

16. OTHER INFORMATION

MSDS No:	12127
Prepared By:	McCabe, Sandra
Approved By:	Wang, Andy
Title:	Manager, Product Safety

Other Information: For further information, contact Product Safety personnel at (914) 785-3000.

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