

4917 Dawn Avenue
East Lansing, MI 48823-5691

8am to 4:30pm Phone: (517) 351-5900
24-Hour Health/Environmental Emergency Phone: 1-888-354-3323

Effective Date: 11/28/00

Material Safety Data Sheet

MSDS No: 5667

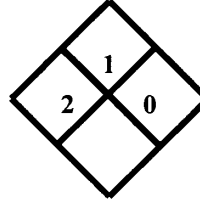
1. PRODUCT IDENTIFICATION

Trade Name: Araldite AY 557

Chemical Family: Epoxy

Synonyms:
Ren Rapid Resin

Intended Use or Product Type: Epoxy Adhesive.



NFPA RATING

Health	2
Flammability	1
Reactivity	0
Protective Equipment	

HMIS RATING

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: Causes allergic skin reaction. May cause skin and eye irritation.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

Chronic: Test results for Diglycidyl Ether of Bisphenol A: 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 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

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"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.

4. FIRST AID MEASURES

Ingestion: If conscious, give 2 - 4 glasses of water to drink. Do not induce vomiting. Call a physician.

Skin: Immediately wash with soap and water. Remove contaminated clothing and laundry before reuse. Destroy contaminated shoes.

Inhalation: Remove to fresh air. Call a physician.

Eyes: Immediately flush eyes with water for at least 15 minutes. Call a physician.

Overexposure Effects: May cause skin and eye irritation. May cause allergic skin reaction.

Medical Conditions Aggravated by Exposure: Skin and eye conditions.

Additional Information: Referral to a physician is recommended if there is any question about the seriousness of any injury.

5. FIRE FIGHTING MEASURES

Flash Point: 455°F (235 °C)

Flash Point Method Used: TCC

Flammable Limits in Air (Lower - % by volume): Not established

Flammable Limits in Air (Upper - % by volume): Not established

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

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: Remove spillage by absorbing in absorbent material.

7. HANDLING AND STORAGE

Signal Word: Warning!

Precautions: Caution! May cause skin and eye irritation. May cause allergic skin reaction. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Other Handling Information: Nuisance dust may be generated when sanding or sawing cured material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Skin Protection: Wear impermeable gloves.

Respiratory Protection: Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

Eye Protection: Wear splash-proof chemical goggles.

Engineering Controls: General mechanical and local exhaust in accordance with ACGIH recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear
Color:	Amber
Physical State:	Liquid
Solubility in Water:	Insoluble
Vapor Pressure:	< 1 mm Hg at 100°C (212 °F)
Specific Gravity:	1.16 (water = 1)
Boiling Point:	> 626°F (> 330 °C)
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
pH:	Not Determined

Percent Volatile: Negligible.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Excessive heat for prolonged periods of time.

Stability: Stable.

Incompatibility: Strong oxidizers, acids and bases.

Hazardous Decomposition Products: Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Sensitization: Possible in susceptible individuals.

Skin Irritation: Mild irritant.

Eye Irritation: Mild irritant.

Teratogenicity: Test results for Diglycidyl Ether of Bisphenol A: No adverse effects on embryonic or fetal development were observed (rats, rabbits).

Mutagenicity: Test results for Diglycidyl Ether of Bisphenol A: Ames test: both positive and negative results; Hamster bone marrow cytogenetics (in vivo): negative; Mouse spermatocytes cytogenetics (in vivo): negative; Micronucleus test (in vivo):

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negative; Mouse dominant lethal test: negative; Alkylation of DNA: positive; Human mononucleated WBC (in vivo): negative; Host mediated assay: negative.

Sub-Chronic: Test results for Diglycidyl Ether of Bisphenol A: No observable effect at highest level studied (1000 mg/kg/day for 28 days - rats).

Chronic Skin Exposure Effects: Test results for Diglycidyl Ether of Bisphenol A: 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 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 CF1 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

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT: Non-Bulk

Proper Shipping Name: Resin compounds, N.O.I.

Department of Transportation: Not regulated as a hazardous material by the U.S. Dept. of Transportation (DOT) 49 CFR 172.101 hazardous materials table.

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).

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 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 the following chemical(s) that are subject to a Section 12(b) export notification:

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Chemical Name: Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-
Common Name: Diglycidyl Ether of Bisphenol A
CAS Number: 1675-54-3

State Regulations:

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

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
Common Name: Bisphenol A Diglycidyl Ether Polymer
CAS Number: 25068-38-6
Comment: Not on Pennsylvania Hazardous Substance List

16. OTHER INFORMATION

MSDS No: 5667
Approved By: Kenneth L. Payne
Title: E,H&S Manager

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