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**Effective Date:** 11/3/05

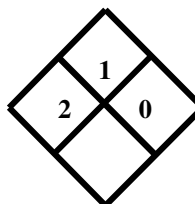
**Material Safety Data Sheet**

MSDS No: 6327

**1. PRODUCT IDENTIFICATION**

**Trade Name:** Araldite AW 8535

**Chemical Family:** Epoxy



NFPA RATING

<b>Health:</b>	<b>2*</b>
<b>Flammability:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	

HMIS RATING

**Intended Use or Product Type:** Epoxy adhesive resin

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				MFR.	CARCINOGEN STATUS		
			ACGIH		OSHA			IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	14464-46-1	Cristobalite (SiO <sub>2</sub> ) Common Name: Crystalline silica	0.05 mg/m <sup>3</sup>	NE	2.5 mg/m <sup>3</sup>	NE	NE	Yes	Yes	NR
*	14808-60-7	Quartz (SiO <sub>2</sub> ) Common Name: Crystalline silica	0.05 mg/m <sup>3</sup>	NE	0.1 mg/m <sup>3</sup>	NE	NE	Yes	Yes	NR
*	17557-23-2	OXIRANE, 2,2'-[(2,2-DIMETHYL-1,3-PROPANEDIYL)BIS(OXYMETHYLENE)]BIS-Neopentylglycol diglycidyl ether	NE	NE	NE	NE	NE	NR	NR	NR
*	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

\* = OSHA Hazardous Ingredient

**3. HAZARDS IDENTIFICATION**

**Emergency Overview:** Causes skin and eye irritation. May cause allergic skin reaction.

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

**Chronic:** This product contains Crystalline silica. Repeated inhalation of respirable free Crystalline silica dust may cause delayed lung injury (silicosis) and cancer. This product contains diglycidyl ether of neopentyl glycol. Diglycidyl ether of neopentyl glycol, when applied to the skin of mice during a chronic administration study, produced skin tumors.

#### **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 launder 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:** Causes 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**

<b>Flash Point:</b>	> 200°F (> 93 °C)
<b>Flash Point Method Used:</b>	Estimated
<b>Flammable Limits in Air (Lower - % by volume):</b>	Not established
<b>Flammable Limits in Air (Upper - % by volume):</b>	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:** Can cause skin irritation, eye irritation, and allergic skin reaction. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

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**Other Handling Information:** Crystalline silica may be generated when machining cured products. Overexposure may create possible cancer and silicosis hazard.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**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**

<b>Color:</b>	Off White
<b>Physical State:</b>	Thixotropic Paste
<b>Solubility in Water:</b>	Negligible
<b>Vapor Pressure:</b>	Not Determined
<b>Specific Gravity:</b>	1.4 (water = 1)
<b>Boiling Point:</b>	Not Determined
<b>Evaporation Rate:</b>	Not Determined
<b>Vapor Density:</b>	Not Determined
<b>VOC:</b>	0.04 Lbs/Gallon
<b>pH:</b>	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.

**Carcinogenicity:** This product contains crystalline silica. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

Neopentyl glycol diglycidyl ether was found to be carcinogenic in skin painting tests on mice. Limited evidence of mutagenicity. Effect on humans not known.

**Skin Irritation:** Irritant.

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Eye Irritation: Irritant.

**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 product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**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:** All chemical components of this product are in compliance with TSCA inventory requirements.

**TSCA Section 12(b) - Export Notification:** This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

**State Regulations:**

**California Proposition 65:** The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Chemical Name: Cristobalite (SiO<sub>2</sub>)

Common Name: Crystalline silica

CAS Number: 14464-46-1

Percent in Composition: 4.815 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Quartz (SiO<sub>2</sub>)

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Common Name: Crystalline silica

CAS Number: 14808-60-7

Percent in Composition: 0.321 % by wt

Comment: Warning! This chemical is known to the State of California to cause cancer.

**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

Chemical Name: Calcium Metasilicate

Common Name: Wollastonite

CAS Number: 13983-17-0

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Silicic Acid, Calcium Salt

Common Name: Calcium silicate

CAS Number: 1344-95-2

Comment: Hazardous Substance

Chemical Name: Cristobalite (SiO<sub>2</sub>)

Common Name: Crystalline silica

CAS Number: 14464-46-1

Comment: Hazardous Substance

Chemical Name: OXIRANE, 2,2'-[(2,2-DIMETHYL-1,3-PROPANEDIYL)BIS(OXYMETHYLENE)]BIS-

Common Name: Neopentylglycol diglycidyl ether

CAS Number: 17557-23-2

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Siloxanes and silicones, di-me, reaction products with silica

Common Name: Amorphous hydrophobic fumed silica

CAS Number: 67762-90-7

Comment: Not on Pennsylvania Hazardous Substance List

**16. OTHER INFORMATION**

<b>MSDS No:</b>	6327
<b>Approved By:</b>	Dianne Blessing
<b>Title:</b>	EHS Specialist

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