

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:** 2/14/01

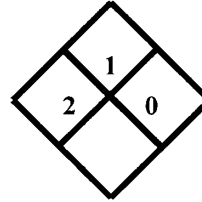
**Material Safety Data Sheet**

MSDS No: 5671

**1. PRODUCT IDENTIFICATION**

**Trade Name:** Araldite CW 2122-1

**Chemical Family:** Epoxy



NFPA RATING

Health	2*
Flammability	1
Reactivity	0
Protective Equipment	

HMIS RATING

**Intended Use or Product Type:** Filled Epoxy 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				
*	14808-60-7	Quartz (SiO <sub>2</sub> )  Common Name: Crystalline Silica	.1 mg/m <sup>3</sup>	NE	mg/m <sup>3</sup>	NE	NE	Yes	Yes	NR
*	2425-79-8	Oxirane, 2,2'-[1,4-butanediy]bis(oxymethylene)]bis-Butanediol 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
	7723-14-0	Phosphorus	.02 ppm	NE	.1 mg/m <sup>3</sup>	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:** Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury. This product contains Crystalline silica. Repeated inhalation of respirable free Crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

#### 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>	Red
<b>Odor:</b>	Slight epoxy
<b>Physical State:</b>	Liquid
<b>Solubility in Water:</b>	Moderate
<b>Vapor Pressure:</b>	< 1
<b>Specific Gravity:</b>	1.7 (water = 1)
<b>Boiling Point:</b>	Not Determined
<b>Evaporation Rate:</b>	< 1 Not Evaluated
<b>Vapor Density:</b>	> 1
<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:** Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

**Skin Irritation:** Irritant.

**Eye Irritation:** Irritant.

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**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 contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: Phosphorus

Percent in Composition: 3.3493 % by wt

Comment:

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

**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: Quartz (SiO<sub>2</sub>)

Common Name: Crystalline Silica

CAS Number: 14808-60-7

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Percent in Composition: 15.1005 % 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: Aluminum hydroxide

Common Name: Hydrated Alumina

CAS Number: 21645-51-2

Comment: Not on Pennsylvania Hazardous Substance List

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

Common Name: Crystalline Silica

CAS Number: 14808-60-7

Comment: Hazardous Substance

Chemical Name: Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis-

Common Name: Butanediol Diglycidyl Ether

CAS Number: 2425-79-8

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Iron oxide (Fe<sub>2</sub>O<sub>3</sub>)

CAS Number: 1309-37-1

Comment: Hazardous Substance

Chemical Name: Phosphorus

CAS Number: 7723-14-0

Comment: Environmental Hazardous Substance

## **16. OTHER INFORMATION**

**MSDS No:** 5671  
**Approved By:** Kenneth L. Payne  
**Title:** E,H&S Manager

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