

Product Name: A-1 Epoxy Adhesive, Resin, Part A

MSDS No.: 11-000500

Date of Issue: 12/13/94

Page: 1 of 5

# Armstrong Products Division MATERIAL SAFETY DATA

Resin Technology Group, Inc. □ 28 Norfolk Ave., S. Easton, MA 02375 □ (508) 230-8070 Fax (508) 230-2318

## 1. MATERIAL IDENTIFICATION

Product Name: **A-1 Epoxy Adhesive, Resin, Part A**

Chemical Family: Epoxy Resin, Mineral Fillers

**EMERGENCY PHONE:** For product emergency involving spill, leak, fire, exposure, or accident call CHEMTREC at (800)424-9300. For all other inquiries please call Resin Technology Group, Inc. at (508)230-8070.

## 2. COMPOSITION

Components	CAS No.	Percent	Exposure Limits	
			ACGIH TLV-TWA (mg/m <sup>3</sup> )	OSHA PEL (mg/m <sup>3</sup> )
Epichlorohydrin/Bisphenol A Resin	25036-25-3	30-60	N.E.	N.E.
Limestone/calcium Carbonate	1317-65-3	10-30	10 (TP)	5(15) (RF,TP)
Quartz(crystalline silica)	14808-60-7	10-30	0.1 (RF)	0.1 (RF)
Alumina/Aluminum Oxide	1344-28-1	10-20	10 (TP)	10 (TP)
Iron(II) Oxide, Hydrate	51274-00-1	1-5	5(fume)	10 (TP)

Note: Due to this product's physical composition, the release or generation of dust is not expected to occur under normal conditions of use.

Abbreviations: N.E.: Not Established; RF: Respirable Fraction; TP: Total Particulate

## 3. HEALTH HAZARDS IDENTIFICATION

Primary Routes of Exposure: Eyes: Yes Skin: Yes Inhalation: No

**Eye Contact:** Contact can cause moderate irritation.

**Skin Contact:** Contact can cause moderate irritation. It can cause the development of hypersensitivity (allergic reactions) in susceptible individuals.

**Inhalation:** Under normal conditions, no adverse effects are expected.

**Ingestion:** This product has a low order of oral toxicity. It is not expected to produce any adverse effects following acute exposure.

**Other:** Depending on the route, frequency, and duration of exposure the following organs and/or systems may be adversely effected: the eyes, skin, and the immune system (allergic reactions). Some of the components in this product may also aggravate existing medical conditions involving the skin or the immune system or specific chemical allergies. Consequently, certain individuals may be more susceptible to the possible effects of overexposure.

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Product Name: A-1 Epoxy Adhesive, Resin , Part A

MSDS No.: 11-000500

Date of Issue: 12/13/94

Page: 2 of 5

## 4. FIRST AID MEASURES

- Eyes:** In case of eye contact, flush with a steady stream of water for 15 minutes. Obtain prompt medical attention.
- Skin:** In case of skin contact, wash with soap and plenty of water. Remove contaminated clothing. Launder clothes before reusing. Destroy or thoroughly clean shoes before reusing. Obtain medical attention.
- Inhalation:** If vapor is inhaled, remove to fresh air. Administer oxygen if there is difficulty breathing. Give artificial respiration if breathing has stopped. Obtain medical attention without delay.
- Ingestion:** If swallowed, call a poison control center, emergency room, or physician. Unless advised otherwise, induce vomiting by giving either syrup of IPECAC followed by 2 glasses of water or by sticking finger down throat.
- Notes to Physicians:** Therapy is directed at preventing absorption, administering to the symptoms as they occur, and providing supportive therapy.

## 5. Fire Fighting Measures

### FLAMMABLE PROPERTIES

- Flash Point:** > 200 deg F, setaflash closed cup.
- Explosive Limits:** Not applicable
- Auto-Ignition Temperature:** Not applicable.
- Hazardous Combustion Products:** May liberate irritating vapors during combustion or decomposition.

### EXTINGUISHING MEDIA and FIRE FIGHTING INSTRUCTIONS

- Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
- Small fires: Use water spray, foam, dry chemical, or carbon dioxide.
- Large Fires: Use water (spray, or fog), or foam.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Ventilate area if necessary, evacuate if airborne levels could exceed established limits. Contain spill using a dike or barrier. If a substantial quantity is spilled and can be pumped, recover with pumping equipment or a vacuum truck. Otherwise, cover spill with an inert absorbent, such as fuller's earth, clay, or other appropriate absorbent. Sweep up and place in a D.O.T. approved metal container. Observe all federal, state, and local reporting regulations regarding material release or spills.

Product Name: A-1 Epoxy Adhesive, Resin , Part A

MSDS No.: 11-000500

Date of Issue: 12/13/94

Page: 3 of 5

**7. HANDLING and STORAGE**

Store in a cool, dry, well ventilated area. Do not store above 100 deg F. Avoid contact with eyes, skin, and clothing. Heating can generate vapors, use appropriate ventilation or approved respirators as necessary.

**8. EXPOSURE CONTROLS and PERSONNEL PROTECTION**

**Engineering / Ventilation Controls:** Maintain airborne concentrations below the established exposure limits. General ventilation may be acceptable, however, enclosure and local exhaust may be required to control exposure when generating vapors or mists. An eye wash facility should be readily available.

**Respiratory Protection:** Where exposure exceeds established airborne limits, use a NIOSH approved respirator, or a self-contained breathing apparatus, or a supplied air respirator as necessary to control exposure.

**Skin Protection:** Wear impervious gloves and protective clothing as necessary to prevent skin contact.

**Eye Protection:** Wear chemical splash goggles or safety glasses with side shields.

**9. STABILITY and REACTIVITY**

**Chemical Stability:** Stable under normal conditions and use.

**Incompatibility:** Amines, Mercaptans, Oxidizing Agents, Acids, Strong Bases, Ammonia

**Conditions to Avoid:** Avoid contact with the above incompatible chemicals.

**Hazardous Combustion or Decomposition Products:**  
Phenolics, Smoke, Soot, Carbon Dioxide, Carbon Monoxide, and Metallic Oxides.

**Hazardous Polymerization:** Will not occur.

**10. PHYSICAL and CHEMICAL PROPERTIES**

<b>Appearance:</b>	Brown fluid	<b>Odor:</b>	Faint epoxy odor
<b>Boiling Point:</b>	app. 527 deg F	<b>Specific Gravity:</b>	1.55
<b>Vapor Pressure:</b>	Not applicable	<b>Vapor Density, (air = 1):</b>	> 1
<b>Evaporation Rate:</b>	Not applicable	<b>Solubility in Water:</b>	Slightly soluble
<b>Percent Volatiles:</b>	None	<b>pH:</b>	Not Applicable

Product Name: A-1 Epoxy Adhesive, Resin , Part A

MSDS No.: 11-000500

Date of Issue: 12/13/94

Page: 4 of 5

## 11. TOXICOLOGICAL INFORMATION

This section provides toxicological information with regard to the pure form of the components indicated. This information can be subject to misinterpretation. It is therefore suggested that this information be interpreted by persons trained in its evaluation.

Epichlorohydrin/Bisphenol A Resin: Can cause slight eye irritation. Prolonged or repeated skin contact can result in irritation. May cause allergic skin reaction in some individuals.

Limestone: Continued long term exposure to calcium carbonate dusts can affect respiratory function. Naturally occurring calcium carbonate can contain, as an impurity, trace amounts of crystalline silica, which has been identified by the IARC as a probable human carcinogen.

Quartz, (Crystalline Silica): Can cause mechanical irritation to the eyes, skin, and gastrointestinal tract. Chronic exposure to crystalline silica dusts can cause silicosis, a fibrotic condition caused by deposition of silicon dioxide particles. Chest pain, and progressive impairment of pulmonary function characterize a silicotic condition. Epidemiological studies indicate lung cancer is more prevalent among individuals affected with silicosis than the general public.

Alumina: Can cause mechanical irritation to the eyes and skin. Treat as a nuisance dust. High concentrations inhaled chronically can lead to the deposition of particulates in the lungs (pneumonconiosis). Alumina may contain, as an impurity, trace amounts of asbestos and crystalline silica.

Iron (II) Oxide, Hydrate: May cause mechanical irritation to the eyes and skin. Prolonged and repeated irritation can lead to the deposition of iron particles in the lungs, (siderosis).

Note: Due to this product's physical composition, the release or generation of dust is not expected to occur under normal conditions of use.

## 12. DISPOSAL CONSIDERATIONS

Disposal must be made in accordance with applicable governmental regulations.

## 13. TRANSPORT INFORMATION

D.O.T. SHIPPING INFORMATION: Not regulated

Product Name: A-1 Epoxy Adhesive, Resin , Part A

MSDS No.: 11-000500

Date of Issue: 12/13/94

Page: 5 of 5

**14. REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS**

**TSCA:** The chemical components of this product are contained on section 8(B) of the chemical substance inventory list (40 cfr 710).

**SARA Title III Information****Section 313 - Toxic Chemicals:**

Pursuant to section 313 of SARA Title III, this product contains a toxic chemical in a concentration in excess of 1 percent of the mixture, or 0.1 percent if the chemical is a carcinogen. The chemical in question is ALUMINA.

**Section 302 - Extremely Hazardous Substances**

Pursuant to section 302 of SARA title III, this product does not contain an extremely hazardous substance.

**Section 311 / 312 - Hazard Categories**

Pursuant to section 311/312 of SARA title III, the physical and health hazard categories for this product are identified as follows:

Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No
Immediate (Acute) Health Hazard:	Yes
Delayed (Chronic) Health Hazard:	No

**STATE REGULATIONS / RIGHT TO KNOW**

**California Proposition 65:** This product contains the following substances known to the state of California to cause cancer, birth defects, or other reproductive harm.

Substances: Quartz (Crystalline Silica)  
Epichlorohydrin

**Pennsylvania:** All of the Materials in this product requiring identification by the Commonwealth of Pennsylvania are listed as follows:

All those chemicals listed in section 2.

Ester, CAS Number: proprietary, Weight percent: 1-5 %.

Some of these materials may have been placed by the Commonwealth of Pennsylvania on their hazardous substance list.

**INTERNATIONAL**

**WHMIS:** This MSDS is in compliance with the requirements of the Canadian Workplace Hazardous Materials Information System.

Resin Technology group urges each customer or recipient of this MSDS to study it carefully in order to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate in order to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: 1 - notify its employees, agents, contractors, and others whom it knows or believes will use this material or the information in this MSDS and any other information regarding hazards or safety; 2 - furnish this same information to each of its customers for the product; and 3 - request its customers to notify their employees, customers, and other users of the product of this information.

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