

Material Safety Data Sheet

Material Name: PSX20 / 34 / 60 Adhesive Hardener

ID: Amer-011

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

*** Section 1 - Chemical Product and Company Identification ***

Part Number: NA

Chemical Name: Polyamine

Product Use: Hardener for adhesive kit

Synonyms:

Manufacturer Information

Ameron International Fiberglass Div
1004 Ameron Road
P. O. Box 878
Burkburnett, TX 76354

Phone#: (940) 569-1471
Fax #: (940) 569-2764
Emergency #: (940) 569-1471
Chemtrec 24 hr#: (800) 424-9300

*** Section 2 - Composition / Information on Ingredients ***

CAS#	Components	Percent
NA	Aliphatic Amine	~75
90-72-2	Modified Aliphatic Polyamine	~5
13983-17-0	Calcium Silicate	~15
67762-90-7	Colloidal Silica (Amorphous)	~10
Proprietary	Proprietary (Methanol @<2%, trace contaminant toluene <50ppm)	~10

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview

Product is an White to Yellow, adhesive hardener compound. Toxic fumes and gases may be released during combustion. Contact may cause irritation or burns to eyes and skin.

Hazard Statements

Warning! May cause allergic skin and respiratory sensitization reactions with prolonged or repeated contact. May cause burns to the eyes and skin. May be irritating to eyes, skin and respiratory system. When adhesive resin is combined with adhesive hardener, vapors and a moderate amount of heat may be released.

Potential Health Effects: Eyes

This product may cause severe eye irritation, including redness, swelling, pain, tearing, and chemical burns. May cause permanent loss of vision.

Potential Health Effects: Skin

This product may cause severe skin irritation, including redness, inflammation, and chemical burns. Prolonged or repeated skin contact may cause allergic skin sensitization reactions, resulting in rash, swelling, itching, and possibly blistering of skin.

Potential Health Effects: Ingestion

Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Ingestion of large amounts may produce more serious toxicities.

Potential Health Effects: Inhalation

Inhalation of vapors may cause severe irritation to the respiratory system. Heating this product will release vapors, which are irritating to the respiratory system. Prolonged or repeated inhalation may cause allergic sensitization reactions, resulting in asthma-like symptoms.

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HMIS RATINGS: Health: 3 Fire: 1 Reactivity:0 Pers. Prot.: neoprene gloves, chemical goggles

Hazard Scale: 0 = Minimal 1= Slight 2= Moderate 3= Serious 4 = Severe * = Chronic hazard

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention or advice.

First Aid: Skin

For skin contact, wash immediately with soap and water. Get medical attention if irritation persists or develops.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice-- Do not induce vomiting unless instructed to do so by medical personnel.

First Aid: Inhalation

If inhaled, immediately remove to fresh air. Provide artificial respiration if necessary. Get immediate medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically. Product may aggravate pre-existing skin and respiratory system disorders.

*** Section 5 - Fire Fighting Measures ***

Flash Point: 200°F

Method Used: SETA

Upper Flammable Limit (UFL): NA

Lower Flammable Limit (LFL): NA

Auto Ignition: NA

Flammability OSHA Combustible: Class IIIB

General Fire Hazards

Irritating and toxic gases or fumes may be released during a fire.

Extinguishing Media

Foam, carbon dioxide, and dry chemical

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus. Closed container may explode when exposed to extreme heat and pressure buildup. Water may be used to cool containers exposed to heat.

NFPA Ratings: Health: 3 Fire: 1 Reactivity: 0 Other 0

Hazard Scale: 0 = Minimal 1= Slight 2= Moderate 3= Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Contain discharged material.

Clean-Up Procedures

Absorb spilled material with nonflammable inert absorbent. Shovel the material into waste container and seal. Do not allow the spilled product to enter public drainage system or open water courses. Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. **DO NOT USE SAWDUST**

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

None

*** Section 7 - Handling and Storage ***

Handling Procedures

Do not get this material in your eyes, on your skin, or on your clothing. Use this product with adequate ventilation. Avoid breathing fumes if this product is used at high temperatures. When adhesive resin is combined with adhesive hardener, vapors

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and a moderate amount of heat may be released. Avoid breathing these vapors. Keep this product from heat, sparks, or open flame. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse.

Storage Procedures

Keep the container tightly closed and store in a cool, well-ventilated place. AVOID PROLONGED STORAGE OVER 100°F.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines

Aliphatic Amine OSHA 0.1 mg/m³ skin
Calcium Silicate OSHA Pel-TWA 5.0 Mg/m³
Colloidal Silica OSHA Pel-TWA 5.0 Mg/m³
Modified Aliphatic Polyamine NE

Engineering Controls

Good general ventilation required. Use local exhaust if necessary.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

Use impervious gloves. The use of neoprene gloves is recommended. Use of protective coveralls and long sleeves is recommended.

Personal Protective Equipment: respiratory

If ventilation is not sufficient to effectively remove vapors and fumes, appropriate NIOSH/MSHA respiratory protection must be provided.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	White to Yellow	Odor:	Amine
Physical State:	Paste	pH:	NA
Vapor Pressure:	NA	Vapor Density:	NA
Boiling Point:	>200°C	Melting Point:	NA
Solubility (H ₂ O):	Very slight	Weight per gal.	10.3240
Freezing Point:	NA	Particle Size:	NA
Softening Point:	NA	Evaporation Rate:	NA
Viscosity:	NA	Bulk Density:	NA
Percent Volatile:	NA	Molecular Weight:	mixture

Physical Properties: Additional Information

None

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable

Chemical Stability: Conditions to Avoid

Keep container tightly closed. Keep away from incompatible materials and excessive heat.

Incompatibility

This product may react with oxidizing agents and strong acids.

Hazardous Decomposition

Carbon monoxide, ammonia, and hydrogen cyanide.

Hazardous Polymerization

When mixed with an epoxy resin, an irreversible, exothermic polymerization reaction occurs, liberating vapors and a moderate amount of heat.

***** Section 11 - Toxicological Information *******Acute Toxicity****A: General Product Information**

Aliphatic Amine

Oral LD50, Rat 1750 mg/kg (Estimate)

Dermal LD50, Rabbit >2000 mg/kg (no deaths)

Inhalation LC50, Rat >700 ppm / 1 hour (no deaths)

B: Component LD50/LC50**Polyethylene (9002-88-4)**

Inhalation LC50 Mouse: 12 gm/m³/30M

Triethylenetetramine (112-24-3)

Oral LD 50 Rat: 2500 mg/kg

oral LD50 Mouse: 1600 mg/kg

Dermal LD50 Rabbit: 805 mg/kg

Phenol (108-95-2)

Inhalation LC50 Rat: 316 mg/m³

Oral LD50 Rat: 317 mg/kg

Oral LD50 Mouse: 270 mg/kg

Dermal LD50 Rabbit: 630 mg/kg

Carcinogenicity**A: General Product Information**

No data available for product.

Phenol induced tumors on the skin of mice and promoted the carcinogenic effect of other substances.

B: Component Carcinogenicity**Polyethylene (9002-88-4)**

IARC: Monograph 19, Supplement 7; 1987 (Group 3 (not classifiable))

Phenol (108-95-2)

ACGIH: A4 - Not Classifiable as a human Carcinogen

IARC: Monograph 47; 1989 (Group 3 [not classifiable])

Epidemiology

No data available for product.

Neurotoxicity

No data available for product.

CNS depression can develop rapidly after phenol ingestion. Long-lasting behavioral changes occurred in a survivor of acute phenol poisoning.

Mutagenicity

No data available for product.

Phenol has been genotoxic in several short-term tests in bacteria. Phenol has also induced sister chromatic exchanges in human cells and mutations in hamster cells. Increased chromosome aberrations were seen in lymphocytes from persons occupationally exposed to phenol.

Teratogenicity

No data available for product.

Phenol has been embryotoxic or fetotoxic, but not teratogenic, in experimental animals.

Other Toxicological Information

None.

***** Section 12 - Ecological Information *****

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Ecotoxicity

No data available for this product.

Environmental Fate

No data is available concerning environmental fate, biodegradation, or bioconcentration for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Wastes may be classified as D002 corrosive wastes. Wastes must be tested to determine applicable waste codes.

B: Component Waste Numbers

Phenol (108-95-2)

RCRA: waste number U188

Disposal instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

*** Section 14 - Transportation information ***

US DOT Information

Shipping Name: CORROSIVE LIQUID, N.O.S. (ALIPHATIC AMINE)

Hazard Class: 8

UN/NA#: UN 1760

Packing Group: III

Required Label(s): CORROSIVE

Additional Info.: None

International Transportation regulations

No additional information.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information.

B: Component Information

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Phenol (108-95-2)

SARA 302: TPQ = 500/10,000 pounds; RQ = 1,000 pounds

SARA 313: form R reporting required for 1.0% de minimus concentration

CERCLA: final RQ = 1,000 pounds (454 kg)

All Identified ingredients are on the TSCA Inventory

State Regulations

A: General Product Information

No additional information.

B: Component Information

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Component	CAS#	CA	FL	MA	MN	NJ	PA
Polyethylene	#9002-88-4	N	N	N	N	N	N
Triethylenetetramine	#112-24-3	N	Y	Y	N	Y	Y
Phenol	#108-95-2	Y	Y	Y	Y	Y	Y

Other Regulations**A: General Product Information**

Components of this product have been checked against the non-confidential TSCA inventory by CAS registry number. Components not identified on this non-confidential inventory are exempt from listing (i.e. polymers) or are listed on the confidential inventory as declared by the supplier.

B: Component Information (Canada)

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	%	Minimum Concentration
Triethylenetetramine	#112-24-3	1 to 10	0.1% item 1629(1669)
Phenol	#108-95-2	0 to 5	1% item 1261 (1374)

All identified ingredients are on the Canadian Domestic Substances List.

*** Section 16 - Other Information ***

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration.

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This is the end of MSDS # AMER-011