

Material Safety Data Sheet

Material Name: RP 6B Hardener

ID: Amer-012

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:

Chemical Name RP 6B Hardener

Product Use: Adhesive hardener for pipe joints

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
Chemtrec 24 hr Emergency #: (800) 424-9300

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

CAS#	Components	Percent
#108-45-2	1, 3 Benzenediamine	<13
#111-40-0	Diethylenetriamine	<12
#1333-86-4	Carbon Black	<2
#14808-60-7	Crystalline Quartz Silica	<75
#67762-90-7	Fumed Silica	<2

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 a black, non-flammable, 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. The Crystalline Silica (Quartz) in the dust form is considered a Cancer or Cancer suspect agent when it is breathed, in this kit the sand is completely incorporated into the resin mix and will only pose a health problem if the cured adhesive is subjected to mechanical grinding.

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 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. The Crystalline Silica (Quartz) in the dust form is considered a Cancer or Cancer suspect agent when it is breathed, in this kit the sand is completely incorporated into the resin mix and will only pose a health problem if the cured adhesive is subjected to mechanical grinding.

HMIS RATINGS: Health: 3 Fire: 1 Reactivity: 1 Pers. Prot.: 0

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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-- administer 3-4 glasses of water or milk --Do not induce vomiting unless instructed to do so by medical personnel. Can cause thermal burns is a large quantity is ingested similar to that of ammonia or ammonia gas.

First Aid: Inhalation

If inhaled, immediately remove to fresh air. Provide artificial respiration if necessary. Get immediate medical attention. The Crystalline Silica (Quartz) in the dust form is considered a Cancer or Cancer suspect agent when it is breathed, in this kit the sand is completely incorporated into the resin mix and will only pose a health problem if the cured adhesive is subjected to mechanical grinding.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically. Product may aggravate pre-existing skin and respiratory system disorders. This product is highly injurious to all tissues.

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

Flash Point: 210°F (DETA)

Method Used: Pensky Martin CC

Upper Flammable Limit (UFL): NA

Lower Flammable Limit (LFL): NA

Auto Ignition: >750°F

Flammability Classification: Class IIIB combustible

General Fire Hazards:

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

Extinguishing Media:

Water, foam, carbon dioxide, and dry chemical

Fire Fighting Equipment/Instructions:

Firefighters should wear full protective clothing including self-contained breathing apparatus.

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

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

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.

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,

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vapors 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 laundry before reuse.

Storage Procedures

Keep the container tightly closed and store in a cool, well-ventilated place. Shelf life two and one half years.

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

Exposure Guidelines:

Deta	TWA, ppm 1, mg/m ³ 4;	TLV: skin 1 ppm	STEL, NE
1,3 Benzenediamine	PEL: NE	TLV: 0.1 mg/m ³ 8 hr TWA A4	
Crystalline Quartz	Mppcf: 250	Mg/M ³ : 10 mg/m ³ , Total Dust	Mg/M ³ : 30 mg/M ³
Other Limits	ACGIH:	TLV: 0.1 MG/m ³	NIOSH: 0.05 mg/M ³
Carbon Black	PEL: 3.5 mg/m ³	TLV: 3.5 mg/m ³ (carbon black is encased in resin system not dust)	

Engineering Controls: Good general ventilation required, use local exhaust if necessary

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses; 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. If grinding on the cured adhesive use dust respirator as required by particulate concentration.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

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

Appearance:	Black	Odor:	Ammoniacal
Physical State:	Paste with sand	pH:	NA
Vapor Pressure:	(mm Hg) <0.1 @ 25°C	Vapor Density:	NA
Boiling Point:	207°C	Melting Point:	NA
Solubility (H₂O):	Slightly	Specific Gravity:	>2
Freezing Point:	-38°C (DETA)	Particle Size:	NA
Softening Point:	NA	Evaporation Rate:	NA
Viscosity:	Very viscous paste	Bulk Density:	NE
Percent Volatile:	NA	Molecular Weight:	NE

Physical Properties: Additional Information

None

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

Chemical Stability: Stable

Conditions to Avoid: Keep container tightly closed. Oxidizing agents, acids, and excessive heat.

Incompatibility: Oxidizing agents, 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**

No information available for the product, it is a mixture of materials.

DETA is toxic by skin absorption, severe eye irritant, severe respiratory tract irritant, corrosive liquid.

1,3 Benzenediamine May irritate skin, eyes, nose and throat. May cause allergic skin rashes. May permeate the skin in toxic amounts. Inhalation may cause nausea, headache, weakness, runny nose, cough and asthma like reactions on repeated exposure with shortness of breath and wheezing. Severe respiratory sensitization may cause chronic lung disease.

Carbon Black No chronic (long-term) effects are known for humans.

Fumed Silica No chronic health effects are known for humans.

Crystalline Silica (Quartz) in the dust form is considered a Cancer or Cancer suspect agent when it is breathed, in this kit the sand is completely incorporated into the resin mix and will only pose a health problem if the cured adhesive is subjected to mechanical grinding.

B: Component LD50/LC50

DETA: LD50 (rat) 1080 mg/Kg; Dermal LD50 (rabbit) 1090 mg/ Kg

1,3 Benzenediamine: LC50 (rat) 4 hour 3.2 (aerosol) mg/L; ALD (rabbit) 1,500 mg/Kg; LD50 (rat) 650 mg/Kg

Fumed silica: LD50 >5 gm/Kg

Carbon Black: LD50 >10,000 mg/Kg (rat)

Crystalline Silica: NE

Carcinogenicity**A: General Product Information**

The product when mixed as used as intended as an adhesive with the Crystalline silica encased in a resin medium should not pose any carcinogenic problems. If the product is mechanically ground then protection from the silica particles are imperative.

B: Component Carcinogenicity

DETA: None

1,3 Benzenediamine: None

Fumed silica: None

Carbon Black: None

Crystalline Silica (Quartz) in the dust form is considered a Cancer or Cancer suspect agent when it is breathed in this kit the sand is completely incorporated into the resin mix and will only pose a health problem if the cured adhesive is subjected to mechanical grinding. If the cured adhesive is subjected to mechanical grinding then dust control and protection is very important. There is no general consensus in the medical science community, based on epidemiology or other information, supporting that respirable crystalline silica dust represents a carcinogenic hazard to workers.

OSHA: NO

NPT: Yes The National Toxicology Program published its sixth annual report on carcinogens in 1992 which concludes that respirable crystalline silica may reasonably be anticipated to be a carcinogen.

IARC Monographs: Yes IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans (Vol. 68, 1997) concludes that there is sufficient evidence for the carcinogenicity of inhaled crystalline silica to humans.

Epidemiology: NA

Neurotoxicity: NA

Mutagenicity:No

Teratogenicity: NA

Other Toxicological Information: N/A

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

1,3 Benzenediamine: 96 hr LC50, fathead minnows 1,618 mg/L; 48 hr. EC50, daphnia magna 1.4 mg/L; 96 hr. EC50, green algae 0.16 mg/L.

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Environmental Fate: The adhesive left after bonding that is cured is considered an inert material for disposal purposes.

*** 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: NE

Disposal instructions: Comply with all Federal, State and local Regulations.

*** Section 14 - Transportation information ***

US DOT Information

Shipping Name: Consumer Commodity

Hazard Class: ORM-D

UN/NA#: None

Packing Group: None

Required Label(s): None

Additional Info.:

International Transportation regulations and air shipments

Shipping Name: ALKYLAMINES

Hazard Class: 8

UN/NA#: UN2735

Packing Group: II

Required Label(s): CORROSIVE

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information.

B: Component Information

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

1,3 Benzenediamine (CAS# 108-45-2) % by weight: <13

State Regulations

A: General Product Information

No additional information.

B: Component Information

NA

A: General Product Information

No additional information.

B: Component Information

No additional information.

*** 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

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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 MSDA # Amer-012