SAFETY DATA SHEET

Product: 820-A Revision Date: 6/01/2015

1. MATERIAL IDENTIFICATION

Product Name: Aremco-Bond 820-A Activator

Product Description: Mercaptan Polymer Liquid Mixture, Clear, Sulfur Odor

Product Use: High Performance Adhesive Hardener

Manufacturer: Aremoo Products, Inc. 707-B Executive Blvd.

Valley Cottage, NY 10989

Telephone: 845-268-0039

Emergency Phone: 845-268-0039 or Infotrac (24/7) 800-535-5053

2. HAZARDS IDENTIFICATION

GHS Classification:

Acute Toxicity, Oral Category 4
Skin Irritation Category 2
Eye Irritation Category 2A

GHS Label Elements:



GHS Signal Word:

Warning

GHS Hazard Determining Component:

2,4,6-Tris(Dimethylaminomethyl)Phenol Mercaptan Terminated Polymer

GHS Hazard Statements for Health Hazards:

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

GHS Precautionary Statements - Prevention:

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves, eye and face protection.

GHS Precautionary Statements - Response:

P301+P312 IF SWALLOWED: Call a poison center or doctor if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs, get medical attention.

P362 Take off contaminated clothing and wash before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue

rinsing.

P313+P337 If eye irritation persists, get medical attention.

GHS Storage/Disposal:

P501 Dispose in accordance with local, regional, national or international regulations.

3. COMPOSITION

Chemical Name	CAS No.	EC No.	Concentration	GHS Product Identifier
Mercaptan Terminated Polymer (New Jersey Trade Secret Registry 33611900-5145KP)	None	None	>95.0%	None
2,4,6- Tris(Dimethylaminomethyl)Phenol	90-72-2	203-013-9	<2.5%	H302 Acute Toxicity, Oral, Cat 4 H315 Skin Corrosion/Irritation, Cat 2 H319 Eye Damage/Irritation, Cat 2A

4. FIRST AID MEASURES

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If a physician is not immediately available, eye irrigation should be continued for an additional 15 minutes.

Skin Exposure:

Immediately wipe excess material off skin with a dry cloth then wash with plenty of soap and water for at least 5 minutes. See medical attention if irritation develops or persists. Remove contaminated clothing and shoes and clean thoroughly before re-use.

Inhalation:

Remove from immediate source of exposure and assure that victim is breathing. If not breathing, administer cardio-pulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Seek medical attention. Symptoms can be delayed several hours.

Ingestion:

If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of milk or water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention immediately. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give additional milk or water to further dilute the chemical.

5. FIRE FIGHTING MEASURES

Extinguishing Media:

Use carbon dioxide, dry chemical, foam, or water spray.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Extreme heat or water contamination may cause closed containers to explode.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection:

Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Use NIOSH approved respirator where mist occurs.

Spill Cleanup:

Mop up liquid and absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust) and dispose in accordance with federal, state and local regulations or permits. Flush area with solvent then water to complete cleanup.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Keep container closed. Promptly clean residue from closures with cloth and solvent. Promptly clean up spills.

Storage:

Store at room temperature in a dry, well ventilated area, away from combustible material, and away from ignition sources. Keep containers closed. Store in clean plastic or steel containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of material with critical values that have to be monitored at the workplace.

Wear chemical goggles or face shield.

Chemical Name	CAS No.	EC No.	TLV (mg/m³)	PEL (mg/m³)
Engineering Controls:			hould be used. Keep containe	rs closed. Safety shower and
Respiratory Protection:	eyewash fountain should be within direct access. This product is not considered respirable in either the liquid or cured forms. However, if the cured product is polished, ground or chipped during processing, handling or use, powders may be released as airborne respirable particles. In these instances, appropriate personal protection equipment and local ventilation controls must be employed. If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved vapor respirator is required.			
Skin Protection:	Wear body-covering pr	rotective clothing and glov	es.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid Color: Clear Odor: Sulfur Odor Threshold: Not Determined pH: Not Determined Melting Point Range: Not Determined Boiling Point Range: Not Determined 259 °C (498 °F) Flash Point (Closed Cup): Flammability (solid, gaseous): Not Applicable Decomposition Temperature: Not Determined Ignition Temperature: 315 °C (599 °F)

Auto Igniting:Not DeterminedDanger of Explosion:Product does not present an explosion hazard

Explosion Limits

Eye Protection:

Lower:
Upper:
Not Determined
Vapor Pressure:
Not Determined
Not Determined
Not Determined
Not Determined
Not Determined
Not Determined
Vapor Density:
Not Determined
Evaporation Rate:
Not Determined

Solubility in / Miscibility Water: Not miscible or difficult to mix

Partition Coefficient

(n-Octanol/Water): Not Determined Viscosity, Dynamic: Not Determined Viscosity, Kinematic: Not Determined

Volatile Organic Compounds: 0.0%

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal conditions of use and storage.

Conditions to Avoid: None if used according to specifications.

Materials to Avoid: Strong acids, strong bases, strong oxidizers, epoxy resins.

Hazardous Polymerization: May occur with epoxy resins in large masses, greater than 100 grams. **Hazardous Decomposition Materials:** Hydrogen sulfide, carbon monoxide, sulfur oxides (SOx), and carbon dioxide

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Primary Irritant Effect: Skin: No irritant effect

Eye: No irritant effect

Sensitization: No sensitizing effects known

Additional Toxicological: When used and handle according to specifications, the product does not have any harmful effects according to

our experience and the information provided to us. The substance is not subject to classification.

Carcinogenic Categories: IARC Substance is not listed

NTP Substance is not listed OSHA Substance is not listed

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: No further relevant information available.

Persistence & Degradability: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: No further relevant information available.

General Notes: Water hazard class 1 (self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT & vPvB Assessment:

PBT:Not applicable.VPvB:Not applicable

Other Adverse Effects: No further information available.

13. DISPOSAL CONSIDERATIONS

Disposal: Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if

any exposure to the environment occurs or is likely to occur. Utilize an appropriate disposal facility, in

compliance with federal, state and local environmental control regulations.

14. TRANSPORTATION INFORMATION

DOT UN Status: The material is not a regulated hazardous material for transportation.

15. REGULATORY INFORMATION

U.S. Federal Regulations

CERCLA: No CERCLA reportable quantity has been established for this material.

TSCA: All ingredients of this material are listed on the TSCA inventory.

SARA Title III

Sections 302, 304, 313, 355: This product does not contain any substances reportable under these sections.

Sections 311, 312:

Hazard Classes	Yes/No
Fire Hazard	No
Reactivity Hazard	No
Pressure Hazard	No
Immediate Hazard	Yes
Delayed Hazard	No

International Inventory	Status
Canada (DSL)	Yes
Europe (EINECS/ELINCS)	Yes
Australia (AICS)	Yes
Japan (MITI)	Yes
South Korea (KECL)	Yes

16. OTHER INFORMATION

NFPA Ratings (scale 0 – 4)	Health, 1 Flammability, 1 Reactivity, 0 Personal Protection, H	110 H
HMIS Ratings (scale 0 – 4)	Health, 1 Flammability, 1 Reactivity, 0 Personal Protection, H	H 1 F 1 R 0 Rectified H

Key Legend Information

ACGIH American Conference of Governmental Industrial Hygienists

ARD International Agency for Research on Cancer

CAS Chemical Abstract Service

CERCLA Comprehensive Environmental Response, Compensation & Liability Act

DSL Domestic Substance List EC European Commission

HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer

ND Not Determined
NE Not Established

NFPA National Fire Protection Association

NIOSH National Institute for Occupational Safety & Health NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

RE Repeat Exposure

SARA Superfund Amendments & Reauthorization Act
SARA Title III Emergency Planning & Community Right to Know Act

SARA Section 302 Extremely Hazardous Substances

SARA Section 304 Emergency Release

SARA Section 311 MSDS/List of Chemicals & Hazardous Inventory

SARA Section 312 Emergency & Hazardous Inventory
SARA Section 313 Toxic Chemicals & Release Reporting

SE Single Exposure

STEL Short Term Exposure Limit
STOT Specific Target Organ Toxicity
TLV Threshold Limit Value
TWA Time Weighted Average

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SAFETY DATA SHEET

Product: 820-B 6/01/2015 Revision Date:

MATERIAL IDENTIFICATION

Product Name: Aremco-Bond 820-B Base Resin

Product Description: Epoxy Resin Mixture, Clear, Epoxy Odor **Product Use:** High Performance Adhesive Resin

Manufacturer: Aremco Products, Inc. 707-B Executive Blvd.

Valley Cottage, NY 10989

Telephone: 845-268-0039

Emergency Phone: 845-268-0039 or Infotrac (24/7) 800-535-5053

2. HAZARDS IDENTIFICATION

GHS Classification:

Skin Irritation Category 2 Eye Irritation Category 2A Skin Sensitization Category 1

GHS Label Elements:



GHS Signal Word:

Warning

GHS Hazard Determining Component:

Reaction Product: Bisphenol-A-(Epichlorhydrin) Epoxy Resin

GHS Hazard Statements for Health Hazards:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

GHS Precautionary Statements - Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray. P261

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves. P280

GHS Precautionary Statements - Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical attention. P332+P313

P362 Take off contaminated clothing and wash before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses

if present and easy to do and continue rinsing.

P313+P337 If eye irritation persists, get medical attention.

GHS Storage/Disposal:

Dispose in accordance with local, regional, national or international regulations. P501

3. COMPOSITION

Chemical Name	CAS No.	EC No.	Concentration	GHS Product Identifier
Reaction Products: Bisphenol-A- (Epichlorhydrin) Epoxy Resin (number average molecular weight <= 700)	25068-38-6	500-033-5	100.0%	H315, Skin Corrosion/Irritation, Cat 2 H317 Sensitization, Skin, Cat 1 H319 Eye Damage/Irritation, Cat 2A

4. FIRST AID MEASURES

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If a physician is not immediately available, eye irrigation should be continued for an additional 15 minutes.

Skin Exposure:

Immediately wipe excess material off skin with a dry cloth then wash with plenty of soap and water for at least 5 minutes. See medical attention if irritation develops or persists. Remove contaminated clothing and shoes and clean thoroughly before re-use.

Inhalation:

Remove from immediate source of exposure and assure that victim is breathing. If not breathing, administer cardio-pulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Seek medical attention. Symptoms can be delayed several hours.

Ingestion

If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of milk or water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention immediately. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give additional milk or water to further dilute the chemical.

Medical Conditions Possibly Aggravated by Exposure:

Inhalation of product may aggravate existing chromic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

Extinguishing Media:

Use carbon dioxide, dry chemical, or appropriate foam.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Extreme heat or water contamination may cause closed containers to explode.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection:

Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Use NIOSH approved respirator where mist occurs.

Spill Cleanup:

Absorb with liquid-binding material (sand, diatomite, universal binders, or sawdust). Mop up liquid and dispose in accordance with federal, state and local regulations or permits. Flush area with solvent then water to complete cleanup.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Keep container closed. Promptly clean

residue from closures with cloth and solvent. Promptly clean up spills.

Storage: Store at room temperature in a dry, well ventilated area, away from combustible material, and away from ignition

sources. Keep containers closed. Store in clean plastic or steel containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of material with critical values that have to be monitored at the workplace.

Wear chemical goggles or face shield.

Chemical Name	CAS No.	EC No.	TLV (mg/m³)	PEL (mg/m³)
Engineering Controls:				ainers closed. Safety shower and
Respiratory Protection:	eyewash fountain should be within direct access. This product is not considered respirable in either the liquid or cured forms. However, if the cured product is polished, ground or chipped during processing, handling or use, powders may be released as airborne respirable particles. In these instances, appropriate personal protection equipment and local ventilation controls must be employed. If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved vapor respirator is required.			
Skin Protection:	Wear body-cover	ing protective clothing and	gloves.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid Color: Clear Odor: **Epoxy Odor** Not Determined Odor Threshold: pH: Not Determined Melting Point Range: Not Determined Boiling Point Range: > 500 °F (300 °C) Flash Point (Closed Cup): 480 °F (249 °C) Flammability (solid, gaseous): Not Applicable Decomposition Temperature: Not Determined Auto Igniting: Not Determined

Danger of Explosion: Product does not present an explosion hazard

Explosion Limits

Eye Protection:

Lower:
Upper:
Not Determined
Not Determined
Vapor Pressure (mm Hg):
Capor Pressure (mm Hg):
Not Determined
Not Determined
Not Determined
Not Determined
Vapor Density:
Vapor Density:
Not Determined
Not Determined

Solubility in / Miscibility Water: Not miscible or difficult to mix

Partition Coefficient

(n-Octanol/Water): Not Determined Viscosity, Dynamic: Not Determined Viscosity, Kinematic: Not Determined Volatile Organic Compounds: 0.00 g/l

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal conditions of use and storage.

Possibility of Hazardous Reactions: Reacts with amines, catalysts, oxidizing agents and strong alkali. Hazardous polymerization may occur if mixed

with amines in large masses and/or with heat.

Conditions to Avoid: No further relevant information available.

Incompatible Materials: Strong acids, strong bases, strong oxidizers, amines, and mercaptans. Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and unknown hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Primary Irritant Effect:

Skin: Irritant to skin and mucous membranes

Eye: Irritating effect

Sensitization: Sensitization possible through skin contact

Carcinogenic Effects: The product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or

suspected human carcinogens.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:No further relevant information available.Persistence & Degradability:No further relevant information available.Bioaccumulative Potential:No further relevant information available.Mobility in Soil:No further relevant information available.

Ecotoxicity: Toxic for fish.

General Notes: Water hazard class 2 (self-assessment): Hazardous for water.

Do not allow product to reach ground water, water course or sewage system. Dangerous to drinking water even if small quantities leak into the ground.

Poisonous to fish and plankton. Toxic to aquatic organisms.

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Results of PBT & vPvB Assessment:

PBT: Not applicable.VPvB: Not applicable

Other Adverse Effects: No further information available.

13. DISPOSAL CONSIDERATIONS

Disposal: Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if

any exposure to the environment occurs or is likely to occur. Utilize an appropriate disposal facility, in

compliance with federal, state and local environmental control regulations.

14. TRANSPORTATION INFORMATION

DOT UN Status: The material is not a regulated hazardous material for transportation.

15. REGULATORY INFORMATION

U.S. Federal Regulations

CERCLA: No CERCLA reportable quantity has been established for this material.

TSCA: All ingredients of this material are listed on the TSCA inventory.

SARA Title III

Sections 302, 304, 313: This product does not contain any substances reportable under these sections.

Sections 311, 312:

Hazard ClassesYes/NoFire HazardNoReactivity HazardNoPressure HazardNoImmediate HazardYesDelayed HazardNo

International Inventory	Status
Canada (DSL)	Yes
Europe (EINECS/ELINCS)	Yes
Australia (AICS)	Yes
Japan (MITI)	Yes
South Korea (KECL)	Yes

16. OTHER INFORMATION

NFPA Ratings (scale 0 – 4)	Health, 1 Flammability, 1 Reactivity, 0 Personal Protection, H	1HO
HMIS Ratings (scale 0 – 4)	Health, 1 Flammability, 1 Reactivity, 0 Personal Protection, H	H 1 Figure 1 R 0 RESIDENT PERSONAL H

Key Legend Information

ACGIH American Conference of Governmental Industrial Hygienists

ARD International Agency for Research on Cancer

CAS Chemical Abstract Service

CERCLA Comprehensive Environmental Response, Compensation & Liability Act

DSL Domestic Substance List EC European Commission

HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer

ND Not Determined NE Not Established

NFPA National Fire Protection Association

NIOSH National Institute for Occupational Safety & Health NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

RE Repeat Exposure

SARA Superfund Amendments & Reauthorization Act
SARA Title III Emergency Planning & Community Right to Know Act

SARA Section 302 Extremely Hazardous Substances

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SARA Section 311 MSDS/List of Chemicals & Hazardous Inventory

SARA Section 312 Emergency & Hazardous Inventory
SARA Section 313 Toxic Chemicals & Release Reporting

SE Single Exposure

STEL Short Term Exposure Limit
STOT Specific Target Organ Toxicity
TLV Threshold Limit Value
TWA Time Weighted Average

Disclaimer: The information contained herein is based on data taken from sources believed to be both current and reliable at the time of publication. Aremco Products, Inc. makes no warranty, expressed or implied, as to the accuracy of this MSDS and assumes no liability arising from its use by others. Compliance with all applicable Federal, State and Local laws and regulations remains the responsibility of the user.