MATERIAL SAFETY DATA SHEET

Product: **Aremco-Bond 820-A Activator**
Revision Date: 1/03/2012

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: 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. COMPOSITION

Ingredient	**CAS #**	**ACGIH TLV** (mg/m^3)	**OSHA PEL** (mg/m^3)
Mercaptan Terminated Polymer (New Jersey Trade Secret Registry 33611900-5145KP) (>= 95.0%)	None	N/E	N/E
2,4,6-tris (dimethylaminomethyl) phenol (<= 2.5%)	90-72-2	N/E	N/E

3. HAZARDS IDENTIFICATION

Emergency Overview: Irritating to eyes, skin, and respiratory system.
***Eye Contact*:** May cause eye irritation.
***Skin Contact*:** May cause skin irritation.
***Inhalation Acute*:** Vapors may cause irritation and temporary or permanent sensitization.
***Ingestion Acute*:** Not a likely route of entry. May cause irritation to mouth, esophagus, and stomach.
Physical: Spilled material is tacky, slippery, and difficult to remove from skin.
Chronic: Not listed by IARC, NTP or OSHA as a possible carcinogen.
Other: Pre-existing skin sensitization and respiratory problems may be aggravated by exposure to this product.

HMIS: Health: 1
Flammability: 1
Reactivity: 0
Personal Protection: H

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:
Pre-existing skin, and respiratory disorders may be aggravated by exposure to fumes or vapors of this product.

5. FIRE FIGHTING MEASURES

Flash Point:	498 °F (259 °C) Closed Cup
Flammable Limits:	Not available.
Auto-Ignition Temperature:	Product is not self-igniting.
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.

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 with absorbent such as sand, diatomite, acid binders, universal binders, or sawdust. 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

Engineering Controls:	Normal ventilation for good working conditions should be used. Keep containers closed. Safety shower and eyewash fountain should be within direct access.
Respiratory Protection:	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 protective clothing and gloves.
***Eye Protection*:**	Wear chemical goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical here represent typical properties of this product. Contact Technical Sales for exact specifications.

Appearance:	Liquid
Color:	Clear
Odor:	Sulfur Odor
pH:	Not Determined
Specific Gravity, g/cc	Not Determined
Water Solubility:	Not Soluble
Melting Point:	Not Determined
Boiling Point:	Not Determined
Vapor Pressure (mm Hg):	< 1
Vapor Density (air=1):	> 1
VOC Content, g/l:	0.00

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 Data: CAS# N/D, Mercaptan Terminated Polymer (NJ Trade Secret Registry 33611900-5145KP

Oral	LD50	2.6 mg/kg (rat)
Dermal	LD50	> 10.2 mg/kg (rabbit

Primary Irritant Effect:
On the Skin: Irritant to skin and mucous membranes.
On the Eye: Irritant to eye.
Sensitization: No sensitizing affects known.
Sensitization is possible through skin contact.

12. ECOLOGICAL INFORMATION

Ecotoxity: Not determined.
General Notes: Water hazard class 2 (self-assessment) – slightly hazardous for water.

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 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:	Health:	1
	Flammability:	1
	Reactivity:	0

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
HMIS	Hazardous Materials Identification System
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	Permissable Exposure Limit
RTECS	Registry of Toxic Effects of Chemical Substances
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
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

MATERIAL SAFETY DATA SHEET

Product: **Aremco-Bond 820-B Resin**
Revision Date: 1/03/2012

1. MATERIAL IDENTIFICATION

Product Name: **Aremco-Bond 820-B 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. COMPOSITION

Ingredient	**CAS #**	**ACGIH TLV** (mg/m^3)	**OSHA PEL** (mg/m^3)
Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	25068-38-6	N/E	N/E

3. HAZARDS IDENTIFICATION

Emergency Overview: Irritating to eyes, skin, and respiratory system.
***Eye Contact*:** May cause eye irritation.
***Skin Contact*:** May cause skin irritation and sensitization.
***Inhalation Acute*:** Vapors may cause irritation and temporary or permanent sensitization.
***Ingestion Acute*:** Not a likely route of entry. May cause irritation to mouth, esophagus, and stomach.
Physical: Spilled material is tacky, slippery, and difficult to remove from skin.
Chronic: Not listed by IARC, NTP or OSHA as a possible carcinogen.

HMIS:
Health: 1
Flammability: 1
Reactivity: 0
Personal Protection: H

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:
Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to fumes or vapors of this product.

5. FIRE FIGHTING MEASURES

Flash Point:	480 °F (249 °C).
Flammable Limits:	Not available.
Auto-Ignition Temperature:	Product is not self-igniting.
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:	Mop up liquid with absorbent such as sand, diatomite, acid binders, universal binders, or sawdust. 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

Engineering Controls:	Normal ventilation for good working conditions should be used. Keep containers closed. Safety shower and eyewash fountain should be within direct access.
Respiratory Protection:	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 protective clothing and gloves.
***Eye Protection*:**	Wear chemical goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical here represent typical properties of this product. Contact Technical Sales for exact specifications.

Appearance:	Liquid
Color:	Clear
Odor:	Epoxy
pH:	Not Determined
Specific Gravity, g/cc	Not Determined
Water Solubility:	Not Soluble
Melting Point:	Not Determined
Boiling Point:	> 260 °C (> 500 °F)
Vapor Pressure (mm Hg):	Not Determined
Vapor Density (air=1):	Not Determined
VOC Content, g/l:	0.0
Solids Content:	100.0%

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal conditions of use and storage.
Conditions to Avoid: Avoid elevated temperatures.
Materials to Avoid: Strong acids, strong bases, strong oxidizers, amines, and mercaptans.
Hazardous Polymerization: May occur if mixed with amines in large masses and/or with heat.
Hazardous Decomposition Materials: Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity Data: None.

Primary Irritant Effect:
On the Skin: Irritant to skin and mucous membranes.
On the Eye: Irritating effect.
Sensitization: Sensitization is possible through skin contact.

12. ECOLOGICAL INFORMATION

Ecotoxity: Harmful to aquatic life.
General Notes: Water hazard class 2 (self-assessment) – hazardous for water.

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 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:	Health:	1
	Flammability:	1
	Reactivity:	0

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
HMIS	Hazardous Materials Identification System
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	Permissable Exposure Limit
RTECS	Registry of Toxic Effects of Chemical Substances
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 313	Toxic Chemicals & Release Reporting
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average