SAFETY DATA SHEET

Product: 2200-A 6/01/2015 Revision Date:

1. MATERIAL IDENTIFICATION

Product Name:	Aremco-Bond 2200-A Activator
Product Description:	Amine Mixture, Light Yellow, Slight 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. HAZARDS IDENTIFICATION

GHS Classification:

Oral, Acute Toxicity	Category 4
Skin Irritation	Category 2
Skin Sensitization	Category 1
Eye Irritation	Category 2A
Respiratory, Acute Toxicity	Category 5
Sensitization, Respiratory	Category 1

GHS Label Elements:



GHS Signal Word: Danger

GHS Hazard Determining Component: Formaldehyde, Polymer with Benzeneamine, Hydrogenated Benzyl Alcohol Hydroxy Modified Resin 4,4'-Methylenebis(Cyclohexylamine)

GHS Hazard Statements for Health Hazards:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H333	May be harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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 and eye/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P271	Use only in a well-ventilated area.
P285	In case of inadequate ventilation wear respiratory 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.
P333+P313	If skin irritation or rash 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 continue rinsing.
P313+P337	If eye irritation persists, get medical attention.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a poison center or doctor.

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
Calcium Carbonate	1317-65-3	215-279-6	25.0-50.0%	None
Hydroxy Modified Resin	68457-74-9	270-604-9	10.0-250.0%	H302 Acute Toxicity, Oral, Cat 4 H313 Acute Toxicity, Dermal, Cat 5 H315 Skin Corrosion/Irritation, Cat 2 H320 Eye Irritation, Cat 2B H334 Respiratory Sensitization, Cat 1
Benzyl Alcohol	100-51-6	202-859-9	10.0-25.0%	H302 Acute Toxicity, Oral, Cat 4 H332 Acute Toxicity, Inhalation, Cat 4
Formaldehyde, Polymer with Benzeneamine, Hydrogenated	135108-88-2	217-168-8	10.0-25.0%	H302 Acute Toxicity, Oral, Cat 4 H312 Acute Toxicity, Dermal, Cat 4 H317 Sensitization, Skin, Cat 1
4,4'-Methylenebis(Cyclohexylamine)	1761-71-3	217-168-8	<= 2.5%	H301 Acute Toxicity, Oral, Cat 3 H314 Skin Corrosion//Irritation, Cat 1B H318 Eye Damage/Irritation, Cat 1
Fibrous Glass	65997-17-3	266-046-0	2.5-10.0%	None
Silica, Hydrophobic Amorphous	67762-90-7	614-122-2	2.5-10.0%	None

Notes:

This product is a liquid mixture and all powders are encapsulated.

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: Special Fire Fighting Procedures:

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

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:

Chemical Name	CAS No.	EC No.	TLV (mg/m ³)	PEL (mg/m ³)
Calcium Carbonate	1317-65-3	215-279-6	10	15
Benzyl Alcohol	100-51-6	202-859-9	10 ppm	10 ppm

Wear chemical goggles or face shield.

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. Wear body-covering protective clothing and gloves.

Skin Protection: Eye Protection:

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Color:	Paste Light Yellow
Odor:	Amine-Like
Odor Threshold:	Not Determined
pH:	Not Determined
Melting Point Range:	Not Determined
Boiling Point Range:	205 °C (401 °F)
Flash Point (Closed Cup):	101 °C (214 °F)
Flammability (solid, gaseous):	Not Applicable
Decomposition Temperature:	Not Determined
Ignition Temperature:	435 °C (815 °F)
Auto Igniting:	Product is not self-igniting
Danger of Explosion:	Product does not present an explosion hazard
Explosion Limits	
Lower:	1.3 Vol %
Upper:	13.0 Vol %
Vapor Pressure:	0.1 hPa @ 20 °C
Density:	1.5 g/cc @ 20 °C
Relative Density:	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:	16.0%

10. STABILITY AND REACTIVITY

Chemical Stability:	This material is stable under normal conditions of use and storage.
Conditions to Avoid:	Reacts with epoxy and strong oxidizing agents.
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Materials	: Carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic substances.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	CAS No. 100-51-6 Oral LD50 Dermal LD50	1230 mg/kg (rat)
	CAS No. 135108- Oral LD50 Dermal LD50	
Primary Irritant Effect:	Skin: Eye: Sensitization:	Irritant to skin and mucous membranes Irritating effect Sensitization possible through skin contact and inhalation
Additional Toxicological:	The product show Harmful Irritant	is the following dangers according to internally approved calculation methods for preparations.
Carcinogenic Categories:	NTP Nor	ne of the ingredients is listed ne of the ingredients is listed ne of the ingredients is 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 product 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

No CERCLA reportable quantity has been established for this material.

TSCA:

CERCLA:

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, 2 Flammability, 1 Reactivity, 0 Personal Protection, H		
HMIS Ratings (scale 0 – 4)	Health, 2 Flammability, 1 Reactivity, 0 Personal Protection, H	Hereiner 2 F 1 Remainer 0 restance H	

ECEuropean CommissionHMISHazardous Materials Identification SystemIARCInternational Agency for Research on CancerNDNot DeterminedNENot EstablishedNIOSHNational Fire Protection AssociationNIDSHNational Institute for Occupational Safety & HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRERepeat ExposureSARASuperfund Amendments & Reauthorization ActSARA Section 302Extremely Hazardous SubstancesSARA Section 304Emergency ReleaseSARA Section 311MSDS/List of Chemicals & Hazardous InventorySARA Section 312Emergency & Hazardous InventorySARA Section 313Toxic Chemicals & Release ReportingSESingle ExposureSTOTSpecific Target Organ ToxicityTLVThreshold Limit ValueTWATime Weighted Average
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SAFETY DATA SHEET

Product: 2200-B Revision Date: 6/01/2015

1. MATERIAL IDENTIFICATION

Product Name:	Aremco-Bond 2200-B Base Resin	
Product Description:	Epoxy Resin Mixture, Rust Red Paste, Aromatic 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:

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

GHS Label Elements:



GHS Signal Word: Warning

GHS Hazard Determining Components: Epoxy Phenol Novolac Resin

Bisphenol A Diglycidyl Ether Resin Calcium Carbonate Silica, Hydrophobic Amorphous

GHS Hazard Statements for Health Hazards:

Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects

H411

GHS Precautionary Statements - Prevention:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P261	Avoid breathing vapors
P264	Wash hands thoroughly after handling
P273	Avoid release to the environment
P280	Wear protective gloves.

GHS Precautionary Statements – Response:

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
P391	Collect spillage

GHS Storage/Disposal:

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P405		Store locked up.
P501		Dispose in accordance with local, regional, national or international regulations

3. COMPOSITION

Chemical Name	CAS No.	EC No.	Concentration	GHS Product Identifier
Epoxy Phenol Novolac Resin	25068-38-6	500-033-5	25.0-50.0%	H315 Skin Corrosion/Irritation, Cat 2 H317 Sensitization, Skin, Cat 1 H319 Eye Damage/Irritation, Cat 2A
Calcium Carbonate	1317-65-3	215-279-6	25.0-50.0%	None
Bisphenol A Diglycidyl Ether Resin	25068-38-6	500-033-5	10.0-25.0%	H315 Skin Corrosion/Irritation, Cat 2 H317 Sensitization, Skin, Cat 1 H319 Eye Damage/Irritation, Cat 2A H411 Aquatic Chronic, Cat 2
Silica, Hydrophobic Amorphous	67762-90-7	614-122-2	2.5-10.0%	None

Notes:

This product is a liquid mixture and all powders are encapsulated.

4. FIRST AID MEASURES

Eye Exposure:

Hold evelids 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
Spill Cleanup:	NIOSH approved respirator where mist occurs. 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
Storage:	residue from closures with cloth and solvent. Promptly clean up spills. 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:

Chemical Name	CAS No.	EC No.	TLV (mg/m ³)	PEL (mg/m ³)
Calcium Carbonate	1317-65-3	215-279-6	10	15
Engineering Controls:		n for good working condition should be within direct acce		ainers closed. Safety shower and
Respiratory Protection:	polished, ground respirable particle must be employe	or chipped during processin es. In these instances, appro	g, handling or use, powders m opriate personal protection equ eeded and local ventilation is	However, if the cured product is hay be released as airborne uipment and local ventilation control unavailable, a supplied-air respirato
Skin Protection: Eye Protection:		ing protective clothing and g oggles or face shield.	loves.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Color: Odor: Odor Threshold: pH: Melting Point Range: Boiling Point Range: Flash Point (Closed Cup): Flammability (solid, gaseous): Decomposition Temperature: Auto Igniting: Danger of Explosion: Explosion Limits Lower:	Paste Rust Red Aromatic Not Determined Not Determined Not Determined 392 °F (200 °C) Not Applicable Not Determined Product is not self-igniting Product does not present an explosion hazard Not Determined
Density:	1.8 g/cc @ 20 °C
Relative Density:	Not Determined
Vapor Density:	Not Determined
Evaporation Rate: Solubility in / Miscibility Water: Partition Coefficient	Not Determined Not miscible or difficult to mix
(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. Conditions to Avoid: Reacts with amines and strong oxidizing agents. Hazardous Polymerization: Will not occur. Hazardous Decomposition Products: Carbon monoxide, carbon dioxide and other organic substances.

11. TOXICOLOGICAL INFORMATION

Toxicity:	

CAS No. 28 Oral Dermal	LD50	poxy Phenol Novolac Resin >2000 mg/kg (rat) >2000 mg/kg (rabbit)
Primary Irrita Skin: Eye: Sensitizatior		Irritant to skin and mucous membranes Irritating effect Sensitization possible through skin contact

IARC	None of the ingredients is listed
NTP	None of the ingredients is listed
OSHA	None of the ingredients is listed

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Persistence & Degradability: Bioaccumulative Potential: Mobility in Soil: Ecotoxicity: General Notes:	No further relevant information available. No further relevant information available. No further relevant information available. No further relevant information available. Toxic for fish. 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.
Results of PBT & vPvB Assessment:	
PBT: VPvB:	Not applicable. 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 Classes	Yes/No_

Fire Hazard	No
Reactivity Hazard	No
Pressure Hazard	No
Immediate Hazard	Yes
Delayed Hazard	No
International Inventory	Status
International Inventory Canada (DSL)	<u>Status</u> Yes
Canada (DSL)	Yes
Canada (DSL) Europe (EINECS/ELINCS)	Yes Yes
Canada (DSL) Europe (EINECS/ELINCS) Australia (AICS)	Yes Yes Yes

16. OTHER INFORMATION

NFPA Ratings (scale 0 – 4)	Health, 2 Flammability, 1 Reactivity, 0 Personal Protection, H	
HMIS Ratings (scale 0 – 4)	Health, 2 Flammability, 1 Reactivity, 0 Personal Protection, H	How we way 2 How way 1 Recently 0 Mathematical Structures H

Key Legend Information

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