MATERIAL SAFETY DATA SHEET

Product: 835-MB-L Liquid Binder Revision Date: 1/03/2012

1. MATERIAL IDENTIFICATION

Product Name:	835-MB-L Liquid Binder
Product Description:	Slightly Cloudy, Odorless Liquid
Product Use:	High Temperature Binder and Thinner
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)
Silicate Solution	1312-76-1	N/E	N/E
Water	7732-18-5	N/A	N/A

Notes:

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

2) Exposure values shown for guidance only. Please follow applicable regulations.

3. HAZARDS IDENTIFICATION

Emergency Overview:		Slightly cloudy, odorless liquid. May cause moderate irritation to eyes, skin, and digestive tract.
Eye Contact:		May cause moderate irritation to the eyes.
Skin Contact:		May cause moderate irritation to the skin.
Inhalation Acute:		Mists may cause irritation to upper respiratory track.
Ingestion Acute:		May cause irritation to mouth, esophagus, and stomach.
Chronic Hazards:		No known chronic hazards. Not listed on NTP, IARC or OSHA as carcinogen.
Physical Hazards:		Spilled material is slippery. Dries to form a glassy film that can cut skin.
HMIS:	Health: Flammability: Reactivity: Personal Protection:	1 0 0 C

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.

Ingestion:

If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of 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 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

Flash Point:	Not applicable
Flammable Limits:	This material is non-combustible.
Extinguishing Media:	This material is compatible with all extinguishing media.
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.
Unusual Fire and Explosion Hazards	: This material is non-combustible.

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 and neutralize liquid, then discharge to sewer in accordance with federal, state and local	
	regulations or permits. Flush area with water to complete cleanup. Exercise caution during	
	neutralization as heat may be generated.	

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Keep container closed.
	Promptly clean residue from closures with cloth dampened with water. Promptly clean up spills.
Storage:	Store in an area that is cool, dry, well ventilated, away from combustible material, and away from
	ignition sources. Keep containers closed. Store in clean plastic or stainless steel containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Use with adequate ventilation. 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 dust and mist respirator is required.
Skin Protection: Eye Protection:	Wear body-covering protective clothing and gloves. Wear chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance:	Liquid
Color:	Slightly Cloudy
Odor:	Odorless
pH:	> 11.0
Specific Gravity, g/cc	1.26
Water Solubility:	Soluble
Melting Point Range:	Not available
Boiling Point Range:	Not available
Vapor Pressure:	Not available
Vapor Density (air=1):	Not available
VOC Content, g/l:	0.00

10. STABILITY AND REACTIVITY

Chemical Stability: Conditions to Avoid: Materials to Avoid:	This material is stable under all conditions of use and storage. None. Gels and generates heat when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead,
Hazardous Decomposition Products: Hazardous Polymerization:	and zinc. None. Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity Data: Chronic Toxicity Data: Not available Not available

12. ECOLOGICAL INFORMATION

Ecotoxity: Environmental Fate: Physical/Chemical: Not tested Not tested Sinks and mixes with water. Only water will evaporate from this material.

13. DISPOSAL CONSIDERATIONS

Disposal Method:

Dispose in accordance with federal, state and local regulations and permits.

14. TRANSPORTATION INFORMATION

DOT UN Status:

Immediate Hazard

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

Delayed Hazard	No
International Inventory	Status
Canada (DSL)	Yes
Europe (EINECS/ELINCS)	Yes
Australia (AICS)	Yes
Japan (MITI)	Yes
South Korea (KECL)	Yes

Yes

16. OTHER INFORMATION

NFPA:	Health: Flammability: Reactivity:	1 0 0
Key Legend Info	ormation	
ACGIH ARD CAS CERCLA DSL HMIS ND NE NFPA NIOSH NTP OSHA PEL RTECS SARA SARA Title III SARA Section 3 SARA SECION 3 SA	04 11 12	American Conference of Governmental Industrial Hygienists International Agency for Research on Cancer Chemical Abstract Service Comprehensive Environmental Response, Compensation & Liability Act Domestic Substance List Hazardous Materials Identification System Not Determined Not Established National Fire Protection Association National Institute for Occupational Safety & Health National Toxicology Program Occupational Safety and Health Administration Permissable Exposure Limit Registry of Toxic Effects of Chemical Substances Superfund Amendments & Reauthorization Act Emergency Planning & Community Right to Know Act Extremely Hazardous Substances Emergency Release MSDS/List of Chemicals & Hazardous Inventory Emergency & Hazardous Inventory Toxic Chemicals & Release Reporting Short Term Exposure Limit Threshold Limit Value
TWA		Time Weighted Average

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MATERIAL SAFETY DATA SHEET

Product: Ceramabond 835-MB-P Powder Revision Date: 1/03/2012

1. MATERIAL IDENTIFICATION

Product Name:	Ceramabond 835-MB-P Powder
Product Description: Product Use:	White Powder High Temperature Adhesive/Coating System
Manufacturer:	Aremco Products, Inc. 707-B Executive Blvd. Valley Cottage, NY 10989
Telephone: Emergency Phone:	845-268-0039 845-268-0039 or Infotrac (24/7) 800-535-5053

2. COMPOSITION

Ingredient	CAS #	ACGIH TLV (mg/m ³)	OSHA PEL (mg/m ³)
Aluminum Oxide	1344-28-1	10	15

Notes:

1) Exposure values shown for guidance only. Please follow applicable regulations.

3. HAZARDS IDENTIFICATION		
Eye Con Skin Co Inhalati Ingestic		White powder. May cause moderate irritation to eyes, skin, and digestive tract. May cause moderate irritation to the eyes. May cause moderate irritation to the skin. Dust may cause irritation to upper respiratory track. May cause irritation to mouth, esophagus, and stomach. No known chronic hazards. Not listed on NTP, IARC or OSHA as carcinogen.
HMIS:	Health: Flammability: Reactivity: Personal Protection:	1 0 0 F

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.

Ingestion:

If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of 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 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 and bronchitis. Skin contact may aggravate existing skin disease and rashes.

5. FIRE FIGHTING MEASURES

Flash Point:	Not applicable
Flammable Limits:	This material is non-combustible.
Extinguishing Media:	This material is compatible with all extinguishing media.
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.
Unusual Fire and Explosion Hazards	: This material is non-combustible.

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 and neutralize liquid, then discharge to sewer in accordance with federal, state and local
	regulations or permits. Flush area with water to complete cleanup. Exercise caution during
	neutralization as heat may be generated.

7. HANDLING AND	STORAGE
Handling:	Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Keep container closed.
Storage:	Promptly clean residue from closures with cloth dampened with water. Promptly clean up spills. Store in an area that is dry. Keep containers closed. Store in clean plastic or metal containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.
Respiratory Protection:	If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self- contained NIOSH-approved dust and mist respirator is required.
Skin Protection: Eye Protection:	Wear body-covering protective clothing and gloves. Wear chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance:	Powder
Color:	White
Odor:	Odorless
pH:	9.0-10.0 (Approximate) at 33% Solids in Deionized Water
Specific Gravity, g/cc	3.6
Water Solubility:	Insoluble
Melting Point Range:	Not available
Boiling Point Range:	Not available
Vapor Pressure:	Not applicable
Vapor Density (air=1):	Not applicable
VOC Content, g/l:	0.00

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under all conditions of use and storage. Conditions to Avoid: None. Materials to Avoid: None. Hazardous Decomposition Products: None. Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION Acute Toxicity Data: Not available Chronic Toxicity Data: Not available **12. ECOLOGICAL INFORMATION** Ecotoxity: Not tested Environmental Fate: Not tested Physical/Chemical:

Sinks and mixes with water. Only water will evaporate from this material.

13. DISPOSAL CONSIDERATIONS		
Disposal Method:	Dispose in accordance with federal, state and local regulations and permits.	

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 Fire Hazard Reactivity Hazard Pressure Hazard Immediate Hazard Delayed Hazard	Yes/No No No Yes No
International Inventory Canada (DSL)	<u>Status</u> Yes

Canada (DSL)	Yes
Europe (EINECS/ELINCS)	Yes
Australia (AICS)	Yes
Japan (MITI)	Yes
South Korea (KECL)	Yes
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16. OTHER INFORMATION

NFPA:	Health: Flammability: Reactivity:	1 0 0
Key Legend Inform	nation	
ACGIH ARD CAS CERCLA DSL HMIS ND NE NFPA NIOSH NTP OSHA PEL RTECS SARA SARA Title III SARA Section 302 SARA Section 304 SARA Section 311 SARA Section 313 SARA Section 313 SARA Section 313		American Conference of Governmental Industrial Hygienists International Agency for Research on Cancer Chemical Abstract Service Comprehensive Environmental Response, Compensation & Liability Act Domestic Substance List Hazardous Materials Identification System Not Determined Not Established National Fire Protection Association National Institute for Occupational Safety & Health National Institute for Occupational Safety & Health National Safety and Health Administration Permissable Exposure Limit Registry of Toxic Effects of Chemical Substances Superfund Amendments & Reauthorization Act Emergency Planning & Community Right to Know Act Extremely Hazardous Substances Emergency Release MSDS & Hazardous Inventory Emergency & Hazardous Inventory Toxic Chemicals & Release Reporting Short Term Exposure Limit
TLV TWA		Threshold Limit Value Time Weighted Average

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