

SAFETY DATA SHEET

Product: 669
Revision Date: 6/01/2015

1. MATERIAL IDENTIFICATION

Product Name: Graphi-Bond 669
Product Description: Black, Odorless Paste
Product Use: High Temperature Graphite Adhesive
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:

Eye Irritation Category 2A
Skin Irritation Category 2

GHS Symbol:



GHS Signal Word:

Warning

GHS Hazard Determining Components:

Silicate Solution
Graphite

GHS Hazard Statements for Health Hazards:

H303 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

GHS Precautionary Statements - Prevention:

P264 Wash hands thoroughly after handling.
P280 Wear protective gloves. Wear eye protection.

GHS Precautionary Statements - Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P305 + P351 + P338 IF IN EYES: Remove contact lenses, if present and easy to do. Rinse cautiously with water for several minutes.
P312 IF SWALLOWED: Call a poison center or doctor if you feel unwell
P362 Take off contaminated clothing and wash before reuse.

GHS Storage/Disposal:

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

3. COMPOSITION

Chemical	CAS No.	EC No.	Concentration	GHS Product Identifier
Silicate Solution	1312-769-1	215-687-4	20.0-30.0%	H302 Acute Toxicity, Oral, Cat 4 H315 Skin Corrosion/Irritation, Cat 2 H319 Eye Damage/Eye Irritation, Cat 2A H335 STOT, SE; Respiratory Tract Irritation, Cat 3
Graphite	7782-42-5	231-955-3	20.0-40.0%	H319 Serious Eye Damage/Irritation, Cat 2A H335 STOT, SE; Respiratory Tract Irritation, Cat 3
Water	7732-18-5	NA	30.0-40.0 %	N/A

Note:

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

4. FIRST AID MEASURES

After eye contact:	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.
After skin contact:	Immediately wipe excess material off skin with a dry cloth then wash with soap and water for at least 5 minutes.
After inhalation:	In case of inhalation due to spray mist, machining dust or dried particulate, remove source of exposure and assure that victim is breathing. If not breathing, administer cardio-pulmonary resuscitation (CPR).
After 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.
Medical Conditions Possibly Aggravated by Exposure:	Inhalation of product may aggravate existing chronic 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

Chemical	CAS No.	EC No.	TLV (mg/m ³)	PEL (mg/m ³)
Silicate Solution	1312-76-1	215-687-4	No available information	No available information
Graphite	7782-42-5	231-955-3	2	2
Water	7732-18-5	N/A	No available information	No available information

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:	Wear body-covering protective clothing and gloves.
Eye Protection:	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:	Viscous Paste
Color:	Black
Odor Threshold:	No available information
Odor:	Odorless
pH:	11.0-11.5
Specific Gravity, g/cc	1.40-1.50
Water Solubility:	Soluble
Melting Point:	Not applicable
Boiling Point:	100 °C
Vapor Pressure:	Not applicable
Vapor Density (air=1):	No data
VOC Content:	0.00 lbs/gal
Viscosity:	20,000-40,000 cP
Decomposition Temperature:	Not applicable
Auto-ignition Temperature	Not applicable
Partition Coefficient:	No data
Flash Point:	Not applicable
Flammability:	Not applicable
Evaporation Rate:	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability:	This material is stable under all conditions of use and storage.
Conditions to Avoid:	Prolonged contact with aluminum, brass, copper, lead, and zinc may produce flammable hydrogen gas.
Materials to Avoid:	Gels and heats when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas.
Hazardous Decomposition Products:	None.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Component: CAS No. 1344-09-8, Silicate Solution LD50 Oral, 1153 mg/kg (Rat) LD50, Inhalation, No Data LD50, Dermal, 4640 mg/kg (Rabbit)
Skin Corrosion/Irritation:	Irritating to skin
Serious Eye Damage/Irritation:	Irritating to eyes
Sensitization:	Not sensitizing
Mutagenicity:	No data
Carcinogenicity:	This product is not listed by IARC, NTP, OSHA, or ACGIH as a known or suspected carcinogen.
Reproductive Toxicity:	No data

12. ECOLOGICAL INFORMATION

Ecotoxicity:	This material is believed to be practically non-toxic to aquatic life.
Biodegradation:	This material is inorganic and not subject to biodegradation.
Persistence:	this material is believed to persist in the environment.
Bioconcentration:	This material is not expected to bioconcentrate in organisms.
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:

<u>Hazard Classes</u>	<u>Yes/No</u>
Fire Hazard	No
Reactivity Hazard	No
Pressure Hazard	No
Immediate Hazard	Yes
Delayed Hazard	No

<u>International Inventory</u>	<u>Status</u>
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, 0 Reactivity, 0 Personal Protection, C									
HMIS Ratings (scale 0 – 4)	Health, 1 Flammability, 0 Reactivity, 0 Personal Protection, C	<table border="1"> <tbody> <tr> <td>HEALTH</td> <td>1</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> </tr> <tr> <td>REACTIVITY</td> <td>0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td>C</td> </tr> </tbody> </table>	HEALTH	1	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	C
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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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