

Safety Data Sheet

Blasting Abrasives

Date of Preparation: 8/22/12

1. Chemical Product and Company Identification

Product/Chemical Name: All grades of Blasting Abrasives Manufactured by Gibbco Inc.

CAS Number: Mixture

Synonyms: Boiler Slag

General Use: Media for abrasive blasting.

Company Identification: Gibbco Inc.
617 Shepherd Drive
Cincinnati, OH 45215

Phone: 513-733-8088 **Emergency Phone:** 513-300-9452

2. Hazards Identification

Potential Health Effects

Routes of Entry: Inhalation, eyes, skin.

Target Organs: Skin, Eyes, and Respiratory System

Acute Effects

Inhalation: Prolonged exposure may result in irritation of the respiratory tract. Prolonged exposure may decrease pulmonary function.

Eye: Prolonged exposure may result in irritation or injury.

Skin: Prolonged contact may result in irritation.

Ingestion: May be harmful if swallowed. Immediately contact physician or medical personnel if unusual coughing, tightness in chest, or shortness of breath occurs after exposure.

Carcinogenicity: IARC, NTP, and OSHA do not list Boiler Slag as a carcinogen; however, IARC and NTP list Crystalline Silica and Beryllium as a carcinogen.

Conditions Aggravated by Long-Term Exposure

Chronic Effects: Persistent exposure to airborne dust may harm lungs and decrease pulmonary functions. Exposure may result in irritation to eyes, skin, or the respiratory tract. Mixture contains components which may cause cancer.

Pictogram: Exclamation Mark

3. Composition / Information on Ingredients

<u>Components</u>	<u>Amount</u>	<u>CAS Number</u>	<u>OSHA PEL</u> <u>(mg/m³)</u>	<u>ACGIH TLV</u> <u>(mg/m³)</u>
Amorphous Silica	50% - 55%	7631-86-9	$\frac{30\text{mg/m}^3}{\% \text{SiO}_2 + 2}$ ^(R)	Not Available
Crystalline Silica	< 1%	14808-60-7	$\frac{30\text{mg/m}^3}{\% \text{SiO}_2 + 2}$ ^(T)	0.025
Aluminum Oxide	15% - 40%	1344-28-1	15 ^(T) ; 5 ^(R)	1
Iron Oxide	1% - 60%	1309-37-1	10	5
Titanium Dioxide	0% - 5%	13463-67-7	15	10
Calcium Oxide	0% - 30%	1305-78-8	5	2
Magnesium Oxide	0% - 6%	1309-48-4	15	10
Barium	0.475%	7440-39-3	0.5	0.5
Beryllium	.00029%	7440-41-7	0.002	0.00005

(R) – Respirable Dust

(T) – Total Dust

4. First Aid Measures

Inhalation: Remove to fresh air. Get medical attention if irritation persists.

Eye Contact: Flush eyes with large amounts of water for 15 minutes or until irritation subsides. Remove contact lenses. Hold eyelids apart to ensure thorough cleansing. Get medical attention if condition persists.

Skin Contact: Flush exposed areas thoroughly with soap and water until all product is removed. Remove contaminated clothing and launder before reuse. If irritation persists, get medical attention.

Ingestion: If individual is conscious, give large quantities of water to dilute stomach contents. Do not induce vomiting. Do not attempt to give anything by mouth to a drowsy or unconscious person. Get prompt medical attention.

After first aid, get appropriate in-plant, paramedic, or community medical support.

5. Fire-Fighting Measures

Boiler slag is nonflammable and non-explosive. Flash point, flammable limits, extinguishing media, special firefighting procedures, and unusual fire and explosion hazards are not applicable to these materials.

6. Accidental Release Measures

Spill /Leak Procedures: No special procedures required for clean-up, but it is recommended that this is done mechanically or through the use of hand tools. Wetting with water will reduce any airborne dust.

7. Handling and Storage

Recommended Storage Conditions: Protect against physical damage. Store in a cool, dry well ventilated location, out of direct sunlight. Do not create unnecessary airborne dust when handling. Industrial hygiene surveys of worker exposure in specific boiler slag handling operations are needed to determine the need for engineering controls of airborne dust levels, respiratory protection equipment, and other measures. Under certain conditions, such as handling in confined areas, without adequate ventilation trace metal oxides (including arsenic, and iron) may exceed the OSHA permissible exposure limits and require personal protective equipment.

Shelf Life: See packaging label.

Handling Personnel: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink or smoke in work area. Wash thoroughly after handling.

Section 8 - Exposure Controls / Personal Protection

Airborne Exposure Limits: See section 2 above.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs when feasible (Sec. 2).

Respiratory Protection: Respiratory protection is selected based on a hazard assessment of the work location, including the specific airborne agents, the concentration of the agents, and the permissible exposure limits (PELs). Selection of respiratory protection must follow the requirements in OSHA's Respiratory Protection Standard, 29 CFR 1910.134. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

Protective Clothing/Equipment: Wear protective clothing to prevent repeated or prolonged skin contact with product. Safety glasses with side shields should be worn as minimum protection from potential impact. Goggles should be worn when excessively dusty conditions are present or anticipated. The use of hard hats and steel toe shoes are advised. Gloves may be worn to protect from abrasions, cuts, or scrapes as well as long sleeve shirts to minimize dermal exposure and potential skin irritation.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Appearance and Odor: Granular, uniform shiny black, no apparent odor.

Vapor Pressure: NA

Vapor Density (Air=1): NA

Specific Gravity (H₂O=1): 2.5-3.0

Boiling Point: NA

Melting Point: NA

Evaporation Rate: NA

Solubility in Water: NA

Section 10 - Stability and Reactivity

Stability: Stable

Polymerization: NA

Chemical Incompatibilities: NA

Conditions to Avoid: NA

Hazardous Decomposition Products: NA

Section 11 - Toxicological Information

Toxicity Data:

Exposure to and contact from dust may irritate the respiratory system, eyes, or skin. Boiler Slag is not listed on the NTP, IARC, or OSHA list of carcinogens, however some components of Boiler Slag are known carcinogens. If ingested, it may cause nausea and vomiting.

Section 12 - Ecological Information

Ecotoxicity: The main component(s) of this product are not anticipated to cause any adverse effects to plants or animals.

Section 13 - Disposal Considerations

Disposal of Substance: Material may be disposed of as an inert solid in an appropriate solid waste landfill. See applicable Federal, State, and Local Regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

This product is not classified as a hazardous material under U.S. DOT regulations.

Shipping Name: Not Regulated

Hazard Class: N/A

ID No.: N/A

Packing Group: N/A

Label: N/A

Special Provisions (172.102): N/A

Packaging Authorizations

a) **Exceptions:** N/A

b) **Non-bulk Packaging:** N/A

c) **Bulk Packaging:** N/A

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not a RCRA hazardous substance

CERCLA: Not a CERCLA hazardous substance

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910): Not listed

State Regulations: None

Section 16 - Other Information

Prepared By: KERAMIDA Inc.

Approval Date: August 22, 2012

Supersedes Date: 5/23/02

ADDITIONAL INFORMATION:

The data in this Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Safety Data Sheet (SDS) has been reviewed to fully comply with the guidance contained in the OSHA.

Disclaimer: Gibbco believes, to the best of its knowledge, information and belief, the information contained herein to be current, accurate, and reliable as of the issue date of this Material Safety Data Sheet (MSDS). Because the use of this information and the conditions of handling, use, and storage of these materials are beyond Gibbco's control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. Also, all abrasive products from natural sources are likely to contain trace amounts of metals and other elements. The information and recommendations contained in this MSDS are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable laws and regulations. Additionally, normal PPE (personal protective equipment) practices are always recommended to further reduce any personal risk associated with the use of this product.