



MESBAREH COMPANY

Material safety Data Sheet

II. Chemical Ingredients Composition: 100% Copper Slag (Complex silicates and oxides of iron, silica, calcium, and aluminum)

Component	C.A.S. #	Typical % Weight	Fed OSHA PEL (mg/m ³)	CA OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Iron (Fe)	1309-37-1	30-35	10	5	5
Silica (SiO ₂)	7440-21-3	35-45	15	6	10
Aluminum Oxide (Al ₂ O ₃)	1344-28-1	5-15	15	10	10
Calcium Oxide (CaO)	1305-78-8	0-10	5	2	2
Magnesium Oxide (MgO)	1309-48-4	<1	15	10	10
Crystalline Silica (SiO ₂)	480-86-07	<0.1	0.1	0.1	0.1

Please note that this product may contain some heavy metals in quantities less than 0.1% by weight, including arsenic (As) - typically <0.002% by weight; Fed and CA OSHA PEL = 0.01 mg/ m³, ACGIH TLV =0.01 mg/ m³; and lead (Pb) - typically <0.002% by weight; Fed and CA OSHA PEL= 0.05 mg/ m³; ACGIH TLV =0.05 mg/ m³. Under extreme conditions (e.g. sandblasting in a confined space without sufficient ventilation), OSHA PELs could be exceeded. In these situations, employee exposure monitoring should be performed to determine exposure levels. You can contact us for further information.

III. Physical /Chemical Properties

Physical State: Granular
Specific Gravity: 3.4 - 3.6
Appearance & Odor: Dull Black, Odorless
Boiling Point: N/A
Melting Point: Over 2000° F

Bulk Density: 110 - 120 lbs/ft³
pH: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Evaporation Rate: N/A

IV. Fire & Explosion Hazard Data

Flash Point: N/A
Autoignition Temperature: N/A
Fire Hazard: N/A
Extinguishing Media: N/A
Unusual Fire and Explosion Hazards: N/A

Lower Explosive Limit: N/A
Upper Exposure Limit: N/A
Explosion Hazard: N/A
Special Fire Fighting Procedures: N/A

V. Reactivity Data

Stability: Stable
Incompatibility (Materials to Avoid): Strong mineral acids
Hazardous Thermal Decomposition Products: None expected
Polymerization: Will Not Occur

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VI. Health Hazard Data

Proper precautions should be taken to avoid any health hazard. A health hazard may occur if limits for air contaminants exceed PEL limits as per 29 CFR 1910.1000. Proper engineering controls and ventilation should be used to prevent air contaminants from exceeding PEL limits. NIOSH-approved respirators should be used during all abrasive blasting operations. (For information on potentially hazardous elements refer to Section 2.)

Usual Route(s) of Entry: Inhalation of dust during handling or use

Medical Conditions Possibly Aggravated by Exposure: Chronic diseases or disorders of the respiratory system.

VII. First Aid and Medical Emergency Procedures

Eye Contact: Not anticipated to pose an acute or significant eye contact hazard. In the event of eye contact, flush eyes with generous amounts of water.

Skin Contact: Not anticipated to pose an acute or significant skin contact hazard. Wash with soap and water as needed to remove from skin

Inhalation: Not anticipated to pose an acute or significant inhalation hazard if proper work practices are employed to maintain dust exposure below OSHA PEL's. If overexposure occurs, remove individual to area with fresh air until symptoms cease.

Ingestion: Not considered to be an ingestion hazard.

VIII. Precautions for Safe Handling and Use

Procedures to Follow if Material is Released or Spilled: Using appropriate personnel protective equipment, material should be swept or vacuumed or otherwise collected into appropriate containers.

Waste disposal method(s): Landfill disposal or other methods which are in accordance with local, state and federal regulations. Virgin (unused and uncontaminated) material does not exceed the Toxicity Characteristic Leaching Procedure (TCLP) hazardous waste limits per 40 CFR 261.3. Used or contaminated material should be tested in accordance with 40 CFR 262.11 or any applicable local or state regulations to determine if it is a hazardous waste and disposed of accordingly.

IX. Control Measures

Engineering Controls (Ventilation, etc) : Ventilation should be sufficient to maintain dust levels below applicable exposure limit.

Work Practices (Handling & Storage, etc.): Avoid creating airborne dust during handling and use.

Eye Protection: Safety glasses, goggles or face shields are recommended during abrasive blasting or when dust levels are excessive.

Skin Protection: Gloves and long-sleeved clothing are recommended during abrasive blasting or when dust levels are excessive.

Respiratory Protection: When engineering controls are not sufficient to lower dust levels below the applicable exposure limit, use a NIOSH-approved respirator. NIOSH-approved respirators should be used during all abrasive blasting operations in accordance with 29 CFR 1910.134 (OSHA Respiratory Protection Program).

X. Additional Information

If material is being used for abrasive air blasting, proper protective clothing, eye protection and respiratory protection should be used in accordance with OSHA regulations. If air blasting is being performed in a confined area, proper ventilation should be used in accordance with OSHA regulations.

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