

**Magnesium Ferrosilicon**

**Product:** Magnesium Ferrosilicon (MgFeSi)

**CAS No.:** N.A.

**Trade Names:** Ferrosilicon Magnesium, Inmold, CG Alloys, Flotret, Glomag, Minoc, R5-10, R5-8M, R5-MCa, R5-MCa II, R6-MCa, C6-Ba, L5-10, R5-10FC, Modified R5-10, R3-M, R4-MCa, C7-MCa, Procaloy 142, R5-6HP, C6-3Mca, R6-10, R5-12, C5-6, R5-8, C5-10, R5-9, Inmold II, R4-4, IM6-La, R5-6McaBa, C5-3, R6-12, GLOFLEX, C9-6, C-9, R3-20, R9-12, R6-2

**SECTION I - SUPPLIER INFORMATION**

**Manufacturer:** Globe Metallurgical Incorporated      **Telephone:** (740) 984-2361

**Address:** P.O. Box 157, County Rd. 32, Beverly, OH 45715

**Emergency Phone:** Chemtrec 800-424-9300

**SECTION II - HAZARDOUS INGREDIENT INFORMATION**

| <b>COMPONENTS:</b> | <b>CAS NO.:</b> | <b>%WT:</b> | <b>OSHA PEL:<br/>(mg/M<sup>3</sup>)</b> | <b>ACGIH TLV:<br/>(mg/M<sup>3</sup>)</b> |
|--------------------|-----------------|-------------|---|--|
| Silicon            | 7440-21-3       | 40 - 50     | 5 Resp. Fract.                          | 10 Total Dust                            |
| Magnesium          | 7439-95-4       | 2 - 13      | 5 Resp. Fract.                          |  |
| Chromium           | 7440-47-3       | <0.5        | 0.5                                     | 0.5                                      |
| Barium             | 7440-39-3       | 0.0 - 1.5   | 0.5 Total Dust                          | 0.5 Total Dust                           |

All components are listed in the TSCA.

ACGIH      American Conference of Governmental Industrial Hygienists  
CAS        Chemical Abstract Services  
OSHA      Occupational Safety and Health Administration  
TSCA      Toxic Substance Control Act

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

**Melting Point:** 1250 °C - 1400 °C      **Specific Gravity:** 3 – 5 (H<sub>2</sub>O = 1.0)

**Solubility in Water:** Insoluble

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**Appearance and Odor:** Metallic grey color - no odor

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Special Fire Fighting Procedures:** Fire may be isolated and allowed to burn itself out.

**Unusual Fire and Explosive Hazards:** Lump alloy is not flammable. Very fine dust (minus 325 mesh) may present an explosion hazard when airborne.

### SECTION V - REACTIVITY DATA

**Stability:** Stable as lump and when dry.

**Incompatibility (Materials to Avoid):** Avoid contact with halogen acids and oxidizing materials. Reacts rapidly in hydrofluoric/nitric acid as well as molten alkali.

**Hazardous Decomposition or by Products:** Small amounts of arsine, phosphine, and hydrogen may evolve if moisture contacts fine sized material.

### SECTION VI - HEALTH HAZARD DATA

**Route(s) of Entry:** Inhalation? Yes      Skin? No      Ingestion? Yes      Eyes? Yes

**Health Hazards (Acute and Chronic):** Airborne dust generated through the use or handling of the product may result in respiratory tract and/or eye discomfort.

**Carcinogenicity:** NTP? No      IARC Monographs? No      OSHA Regulated? No

**Emergency and First Aid Procedure:** Wash skin with soap and water. Flush eyes with water for 15 minutes. Remove victim to well ventilated area. Seek medical attention if symptoms persist.

**Signs and Symptoms of Exposure:** Respiratory tract and/or eye discomfort and cough may result from exposure to elevated concentrations of airborne material.

### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

**If Material is Spilled:** Observe health and safety precautions. Collect using methods that minimize creation of airborne dust. High efficiency vacuum cleaning is recommended to recover spilled material. Place in a suitable container for recycling or disposal.

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**Waste Disposal Method:** Dispose of in accordance with applicable federal, state, and local regulations.

**Precautions to be taken in Handling and Storage:** Prevent airborne emissions. Keep material dry when storing for extended periods. Do not reseal wet material. Inert atmosphere advised when sizing to minus 20 mesh or lower.

**Other precautions:** Contact between molten metal and water or any wet materials may cause an eruption. Grinding wet material may be hazardous due to possible hydrogen evolution.

### **SECTION VIII - CONTROL MEASURES**

**Respiratory Protection:** Use 42CFR84 approved respiratory protection when airborne concentrations equal or exceed the Permissible Exposure Limit.

**Ventilation:** Local exhaust suggested in processing areas.

**Eye Protection:** Safety glasses with sideshields. Safety goggles are recommended if airborne dusts are created.

**Other:** Lump material may have sharp edges. Protective gloves should be used while handling lump material.

### **SECTION IX - ADDITIONAL INFORMATION**

These products may contain chromium in the metallic state. The International Agency for Research on Cancer (IARC) has determined that hexavalent chromium compounds are "Causally associated with Cancer in humans". The IARC and OSHA have determined that chromium metal is "not classifiable as a human carcinogen".

All information, recommendations, and suggestions, appearing herein concerning our products are based on data believed to be accurate and reliable. Since the actual use by others is beyond our control, it is the user's responsibility to determine the suitability of the product for its use and to adopt such safety precautions as may be necessary. Since the conditions of use are not under our control, Globe Metallurgical Inc. disclaims all liability with respect to the use of any material supplied by Globe Metallurgical Inc.