Material Safety Data Sheet
Magnesium oxide

Section 1 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white powder.

**Caution!** May cause eye irritation. May cause respiratory tract irritation. Inhalation of fumes may cause metal-fume fever. Hygroscopic (absorbs moisture from the air).

**Target Organs:** Respiratory system, eyes.

**Potential Health Effects**

**Eye:** May cause eye irritation. A slight irritation of the eyes and nose was observed in 95 workers exposed to an unspecified concentration of magnesium oxide dust. (Documentation of TLV)

**Skin:** Dust may cause mechanical irritation. Not absorbed through the skin. Not irritating to the skin, but use of rigorous washing procedures to remove dust may cause skin irritation.

**Ingestion:** No hazard expected in normal industrial use. Practically non-toxic by ingestion.

**Inhalation:** Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. Inhalation of dust may cause irritation of the nose and throat.

**Chronic:** No information found. Does not accumulate. Excess magnesium ion is rapidly excreted in the urine.

Section 2 - First Aid Measures

**Eyes:** Gently lift eyelids and flush continuously with water. If irritation develops, get medical aid.

**Skin:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

Section 3 - Personal Protection

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Glove protection is not normally required.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 4 - Physical and Chemical Properties

Physical State: Powder
Appearance: white
Odor: odorless
pH: 10.3 (saturated aq soln)
Boiling Point: 3600 deg C
Freezing/Melting Point: 2800 deg C
Decomposition Temperature: Not available.
Solubility: Very slightly .0086g/100ml

Section 5 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Absorbs carbon dioxide from the air. Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid: Dust generation, moist air, prolonged exposure to air.
Incompatibilities with Other Materials: Strong acids, interhalogens.
Hazardous Decomposition Products: None.
Hazardous Polymerization: Will not occur.