# **MATERIAL SAFETY DATA SHEET**

#### **SECTION 1 - IDENTITY**

Trade / Common Names: MINERAL BLACK, Iron, Ferrous Sulphate Heptahydrate, M04

Chemical Name / Synonyms: Copperas, Iron Sulfate, Green Vitriol

Chemical Family: Inorganic salt

# **SECTION 2 - HAZARD SUMMARY**

NFPA Rating: NE HMIS Rating: 1-0-0-B

Health 2 (Moderate) Health

Flammability 0 (Insignificant) Flammability Reactivity 0 (Insignificant) Reactivity

CAUTION. Use safe chemical handling practices. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

# **SECTION 3 - COMPONENTS**

Name % CAS No.

Ferrous Sulphate 100% 7782-63-0

# **SECTION 4 - PHYSICAL DATA**

**Boiling Point:** Decomposes >  $572 \,^{\circ}$  F **Melting Point:** N/A

Vapor Pressure: N/A

**pH (1% solution)** 10% solution at 3.3 - 5

**Vapor Density:** N/A Air =1 **Specific Gravity:** 1.898

**Solubility:** 48.6 g/100 ml water at  $50^{\circ}$  F

**Physical Appearance & Odor:** blue green crystals, effloresces in dry air, becomes yellow

brown when stored for extended time periods, forming a layer of ferric sulfate.

# **SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** N/A **Flammable Limits:** N/A

**Extinguishing Media:** Dry Chemicals, CO2, Water Spray, and foam.

Special Fire Fighting Procedures & Equipment: Material is not flammable. Use

extinguishing media suitable to surrounding materials
Unusual Fire & Explosion Hazards: None identified

**Hazardous Incomplete Combustion Products:** None identified

# **SECTION 6 - REACTIVITY DATA**

**Stability:** At ambient temperatures: Stable

At elevated temperatures: Stable

**Conditions to Avoid:** Moisture. Incompatible with strong bases. Avoid potassium,

carbonates, arsenic and sodium nitrate.

**Decomposition products** 

Oxides of sulfur

Hazardous polymerizations will NOT occur.

# **SECTION 7 - SPILL OR LEAK PROCEDURE**

**Steps to be taken if material is spilled:** Contain spill. Sweep or scoop into disposal

container.

**On Highway:** As above.

**Disposal Methods:** Dispose in accordance with federal, state, and local regulations.

# **SECTION 8 - HEALTH HAZARD DATA**

**Classification (29CFR 1910.1200):** 

**Toxicity and Sensitivity Data:** 

Ingestion Oral LD-50: (oral, mouse) 1520 mg/kg; (intravenous, mouse) 51

mg/kg

**Absorption Dermal:** NE

Irritation: NE Inhalation Rate: NE

**Carcinogenicity:** this material is not classified as a carcinogen by OSHA, NTP, and IARC.

**Primary Routes:** None identified

Signs and Symptoms of Exposure (progressive):

• **Inhalation:** Irritation of the respiratory tract.

- **Skin/eyes:** Severe irritation and corrosion of the eye, possibly resulting in conjunctivitis. Possible skin irritation with prolonged exposure.
- **Ingestion:** Severe heartburn, nausea, gastric discomfort, constipation, or diarrhea. Sever hemorrhagic gastritis with abdominal pain, retching, violent diarrhea, and nausea may occur. Circulatory system may be affected with symptoms of shock, rapid, weak, or no pulse; severe hypotension and pulmonary changes with dysapnea and emphysema may occur. The average lethal dose of iron is about 200 to 250 mg per kg of body weight. Chronic exposure has shown reproductive effects in animals.

# **Emergency First Aid Procedures**

Skin contact – wash with soap and water. Seek medical attention if irritation develops.

Eye contact – flush eyes with water. If irritation persists, seek medical attention.

Inhalation - remove to fresh air.

Ingestion – If conscious, give large amounts of water. Seek immediate medical attention.

Additional First aid and treatment notes – no information available.

# **SECTION 9 - REGULATORY INFORMATION**

Component TSCA Inventory

CERCLA RQ SARA EHS TPQ SARA 313 Toxic Release

Ferrous Sulfate

# **SECTION 10 - SPECIAL PROTECTION INFORMATION**

**Respiratory Protection:** None required where adequate ventilation exists. If airborne concentration

exceeds PEL or TLV a dust respirator is recommended.

**Eye Protection:** Safety goggles.

**Protective Clothing:** Protective clothing and gloves. **Personal Hygiene:** Wash with soap and water after handling

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Botanical Colors, LLC. The data on this sheet relates only to the specific material designated herein. Botanical Colors, LLC assumes no legal responsibility for use or reliance upon these data.

Any section omitted is omitted because it is not applicable to this product.

