

Safety Data Sheet (SDS)

According to GHS Standard (16 Sections)

Section 1: Identification

- **Product Name:** Manganese Oxide for Color Control in Green Glass Containers
- **Product Use:** Coloring and decolorizing agent for glass manufacturing.
- **Company Name:** BTLnewmaterial
- **Address:** Room 706, No. 154, Wuyi East Road, Niezhou Residential Committee, Caizichi Sub-district Office, Leiyang City, Hengyang City, Hunan Province, China
- **Email:** lixifirm@outlook.com
- **Phone/WhatsApp:** +86 18273793022
- **Website:** manganesesupply.com
- **Emergency Phone:** +86 18273793022

Section 2: Hazard Identification

- **GHS Classification:**
 - Acute Toxicity, Oral (Category 4)
 - Acute Toxicity, Inhalation (Category 4)
 - Specific Target Organ Toxicity - Repeated Exposure (Category 2) (Brain, Central Nervous System)
- **GHS Label Elements:**
 - **Signal Word:** Warning
 - **Hazard Pictograms:** Exclamation Mark, Health Hazard
 - **Hazard Statements:**
 - H302: Harmful if swallowed.
 - H332: Harmful if inhaled.

- H373: May cause damage to organs (Brain, CNS) through prolonged or repeated exposure.
- **Precautionary Statements:**
 - P260: Do not breathe dust/fume/gas/mist/vapors/spray.
 - P264: Wash skin thoroughly after handling.
 - P270: Do not eat, drink or smoke when using this product.
 - P271: Use only outdoors or in a well-ventilated area.
 - P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 - P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - P314: Get medical advice/attention if you feel unwell.
 - P501: Dispose of contents/container to an approved waste disposal plant.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Concentration (%)
Manganese Oxide (MnO/MnO ₂)	1344-43-0 / 1313-13-9	60% – 65% (as Mn)
Inert Coloring Components	Proprietary	Balance
Arsenic (As)	7440-38-2	≤ 5 ppm
Lead (Pb)	7439-92-1	≤ 10 ppm
Cadmium (Cd)	7440-43-9	≤ 5 ppm

Section 4: First-Aid Measures

- **Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms persist.
- **Skin Contact:** Wash with soap and water. Get medical attention if irritation develops.

- **Eye Contact:** Flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.
- **Most Important Symptoms:** Inhalation of dust may cause respiratory irritation. Chronic exposure to manganese may affect the central nervous system (Manganism).

Section 5: Fire-Fighting Measures

- **Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
- **Special Hazards:** Not flammable. May emit toxic fumes of manganese oxides under fire conditions.
- **Protective Equipment:** Wear self-contained breathing apparatus and full protective clothing.

Section 6: Accidental Release Measures

- **Personal Precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- **Methods for Cleaning Up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

- **Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
- **Storage:** Store in a cool, dry, well-ventilated place. Keep container tightly closed. Store away from moisture and incompatible materials.

Section 8: Exposure Controls/Personal Protection

- **Exposure Limits:**
 - Manganese (as Mn): ACGIH TLV: 0.02 mg/m³ (respirable fraction); 0.1 mg/m³ (inhalable fraction).
- **Engineering Controls:** Use local exhaust ventilation or other engineering controls to maintain airborne levels below exposure limits.
- **Personal Protective Equipment:**
 - **Respiratory:** Use N95 or higher rated dust mask.
 - **Hands:** Wear protective gloves (nitrile or latex).
 - **Eyes:** Wear safety goggles.
 - **Skin:** Wear long-sleeved work clothing.

Section 9: Physical and Chemical Properties

- **Physical State:** Solid (Powder)
- **Appearance:** Dark Brown to Black
- **Odor:** Odorless
- **pH:** Neutral (in aqueous slurry)
- **Melting Point:** ~1,564°C (2,847°F)
- **Boiling Point:** No data available
- **Flash Point:** Not applicable
- **Density:** 1.8 - 2.1 g/cm³ (Bulk)
- **Solubility:** Insoluble in water
- **Partition Coefficient:** No data available
- **Auto-ignition Temp:** Not applicable
- **Decomposition Temp:** No data available
- **Viscosity:** Not applicable

Section 10: Stability and Reactivity

- **Reactivity:** Stable under recommended storage conditions.
- **Chemical Stability:** Stable under normal temperatures and pressures.
- **Possibility of Hazardous Reactions:** No data available.
- **Conditions to Avoid:** Moisture, dust generation.
- **Incompatible Materials:** Strong oxidizing agents, strong acids.
- **Hazardous Decomposition Products:** Manganese oxides.

Section 11: Toxicological Information

- **Acute Toxicity:** Harmful if swallowed or inhaled.
- **Skin Corrosion/Irritation:** May cause mild skin irritation.
- **Serious Eye Damage/Irritation:** May cause mild eye irritation.
- **Respiratory or Skin Sensitization:** No data available.
- **Germ Cell Mutagenicity:** No data available.
- **Carcinogenicity:** Not classified as a carcinogen by IARC, ACGIH, NTP, or OSHA.
- **Reproductive Toxicity:** No data available.
- **STOT - Single Exposure:** May cause respiratory irritation.
- **STOT - Repeated Exposure:** May cause damage to the central nervous system through prolonged or repeated inhalation of dust.

Section 12: Ecological Information

- **Toxicity:** No data available.
- **Persistence and Degradability:** Not readily biodegradable (inorganic).
- **Bioaccumulative Potential:** No data available.
- **Mobility in Soil:** Insoluble in water; expected to have low mobility in soil.
- **Other Adverse Effects:** No data available.

Section 13: Disposal Considerations

- **Waste Disposal:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- **Contaminated Packaging:** Dispose of as unused product.

Section 14: Transport Information

- **DOT (US):** Not dangerous goods.
- **IMDG:** Not dangerous goods.
- **IATA:** Not dangerous goods.
- **UN Number:** Not applicable.
- **Proper Shipping Name:** Not applicable.

Section 15: Regulatory Information

- **SARA 313 Components:** Manganese compounds are subject to reporting levels established by SARA Title III, Section 313.
- **TSCA Inventory:** All components are listed or exempt.
- **California Prop 65:** This product contains trace amounts of Lead and Cadmium, known to the State of California to cause cancer and birth defects.

Section 16: Other Information

- **Revision Date:** March 24, 2026
- **Prepared By:** BTLnewmaterial Technical Department
- **Disclaimer:** The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.