

Safety Data Sheet (SDS / MSDS)

Precipitated Manganese Carbonate ($MnCO_3$)

Section 1: Identification

| Entity | Details |
|-----------------|--|
| Product Name | Precipitated Manganese Carbonate |
| Chemical Name | Manganese(II) Carbonate |
| CAS Number | 598-62-9 |
| Synonyms | Synthetic Manganese Carbonate, Manganous carbonate |
| Supplier Name | BTLnewmaterial |
| Email | lixifirm@outlook.com |
| Phone/WhatsApp | +8618273793022 |
| Website | manganesesupply.com |
| Address | Room 706, No. 154, Wuyi East Road, Niezhou Residential Committee, Caizichi Sub-district Office, Leiyang City, Hengyang City, Hunan Province, China |
| Emergency Phone | +8618273793022 |
| Recommended Use | Industrial chemical, precursor for chemical catalysts, specialty manganese salts. |

Section 2: Hazard Identification

2.1 GHS Classification

- **Eye Irritation:** Category 2B
- **Specific Target Organ Toxicity - Repeated Exposure (Inhalation):** Category 2 (Brain/Central Nervous System)

2.2 GHS Label Elements

- **Signal Word:** Warning
- **Pictogram:** Health Hazard (GHS08)

2.3 Hazard Statements

- **H320:** Causes eye irritation.
- **H373:** May cause damage to the central nervous system through prolonged or repeated exposure if inhaled.

2.4 Precautionary Statements

- **P260:** Do not breathe dust.
 - **P264:** Wash hands and skin thoroughly after handling.
 - **P280:** Wear protective gloves/eye protection/face protection.
 - **P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - **P314:** Get medical advice/attention if you feel unwell.
 - **P501:** Dispose of contents/container in accordance with local/regional/national/international regulations.
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Section 3: Composition/Information on Ingredients

| Component | CAS No. | EC No. | Weight % |
|----------------------------------|-----------|-----------|--------------|
| Manganese Carbonate ($MnCO_3$) | 598-62-9 | 209-942-9 | ≥ 98.0 |
| Iron (Fe) | 7439-89-6 | 231-096-4 | ≤ 0.002 |
| Inert Impurities | N/A | N/A | Balance |

Section 4: First-Aid Measures

- **Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids. Remove contact lenses if present. Seek medical attention if irritation persists.
 - **Skin Contact:** Wash skin with soap and water. Remove contaminated clothing. Seek medical attention if irritation develops.
 - **Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms occur.
 - **Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.
 - **Most Important Symptoms:** Chronic inhalation of manganese dust can lead to “manganism,” a condition similar to Parkinson’s disease.
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Section 5: Fire-Fighting Measures

- **Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
 - **Specific Hazards:** During fire, hazardous decomposition products such as carbon oxides (CO , CO_2) and manganese oxides may be released.
 - **Protective Equipment:** Wear self-contained breathing apparatus (SCBA) and full protective clothing for firefighting.
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Section 6: Accidental Release Measures

- **Personal Precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation.
 - **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains or water sources.
 - **Cleanup Methods:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
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Section 7: Handling and Storage

- **Handling:** Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
 - **Storage:** Keep container tightly closed in a dry and well-ventilated place. Store in a cool place. Hygroscopic. Protect from moisture and direct sunlight.
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Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters (Manganese Compounds, as Mn)

- **ACGIH TLV:** 0.02 mg/m³ (respirable fraction); 0.1 mg/m³ (inhalable fraction).
- **OSHA PEL:** 5 mg/m³ (Ceiling).

8.2 Exposure Controls

- **Engineering Controls:** Use local exhaust ventilation or other engineering controls to maintain airborne levels below exposure limits.
 - **Eye Protection:** Safety glasses with side-shields or chemical goggles.
 - **Skin Protection:** Wear chemical-resistant gloves and protective clothing.
 - **Respiratory Protection:** Use a NIOSH-approved dust mask or respirator (e.g., N95) if dust levels exceed exposure limits.
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Section 9: Physical and Chemical Properties

| Property | Value |
|---------------------|---------------------------------|
| Physical State | Solid (Powder) |
| Color | Light pink to pale brown |
| Odor | Odorless |
| pH (at 5% slurry) | 7.0 - 8.5 |
| Melting Point | Decomposes at > 200°C |
| Boiling Point | N/A |
| Flash Point | Non-flammable |
| Density | 3.12 g/cm ³ |
| Bulk Density | 0.5 - 0.8 g/cm ³ |
| Solubility in Water | Insoluble (0.0065 g/L at 25°C) |
| Solubility in Acids | Soluble in dilute mineral acids |
| Molecular Weight | 114.95 g/mol |

Section 10: Stability and Reactivity

- **Reactivity:** Stable under recommended storage conditions.
- **Chemical Stability:** Stable under normal temperatures and pressures.
- **Possibility of Hazardous Reactions:** No dangerous reactions known under normal use.
- **Conditions to Avoid:** Exposure to moisture. High temperatures (leads to decomposition).
- **Incompatible Materials:** Strong acids, strong oxidizing agents.
- **Hazardous Decomposition Products:** Carbon dioxide, Manganese oxides.

Section 11: Toxicological Information

- **Acute Toxicity:** LD_{50} Oral (Rat) > 2,000 mg/kg.
 - **Skin Corrosion/Irritation:** May cause mild skin irritation.
 - **Serious Eye Damage/Irritation:** Causes eye irritation.
 - **Respiratory or Skin Sensitization:** Not known to be a sensitizer.
 - **Germ Cell Mutagenicity:** Negative.
 - **Carcinogenicity:** Not listed as a carcinogen by IARC, NTP, or OSHA.
 - **Reproductive Toxicity:** No data available.
 - **Chronic Exposure:** Prolonged inhalation of manganese dust can cause central nervous system damage (Manganism).
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Section 12: Ecological Information

- **Toxicity:** Low toxicity to aquatic organisms. LC_{50} (Fish) > 100 mg/L (96h).
 - **Persistence and Degradability:** Inorganic substance; does not biodegrade.
 - **Bioaccumulative Potential:** Low potential for bioaccumulation.
 - **Mobility in Soil:** Low mobility in soil due to low water solubility.
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Section 13: Disposal Considerations

- **Product:** Offer surplus and non-recyclable solutions to a licensed disposal company.
 - **Contaminated Packaging:** Dispose of as unused product in accordance with local regulations.
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Section 14: Transport Information

- **DOT (US):** Not dangerous goods.
- **IMDG:** Not dangerous goods.
- **IATA:** Not dangerous goods.
- **ADR/RID:** Not dangerous goods.

Section 15: Regulatory Information

- **TSCA:** Listed on the United States TSCA Inventory.
 - **SARA 313:** This material contains Manganese, which is subject to the reporting requirements of Section 313 of SARA Title III.
 - **DSL/NDSL:** Listed on the Canadian Domestic Substances List.
 - **IECSC:** Listed on the Inventory of Existing Chemical Substances in China.
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Section 16: Other Information

- **Revision Date:** March 27, 2026
- **Prepared By:** BTLnewmaterial Technical Department
- **Abbreviations:**
 - CAS: Chemical Abstracts Service
 - GHS: Globally Harmonized System
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit

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.*