

# TECHNICAL DATASHEET (TDS)

---

**Product Name:** Manganese Sulfate Monohydrate ( $\text{MnSO}_4 \cdot \text{H}_2\text{O}$ ) 31.8%

**Grade:** Hydroponic Grade / Fertilizer Grade

**Manufacturer:** BTLnewmaterial

---

## 1. COMPANY INFORMATION

---

- **Company Name:** BTLnewmaterial
  - **Email:** lixifirm@outlook.com
  - **Phone/WhatsApp:** +8618273793022
  - **Website:** [manganesesupply.com](http://manganesesupply.com)
  - **Address:** Room 706, No. 154, Wuyi East Road, Niezhou Residential Committee, Caizichi Sub-district Office, Leiyang City, Hengyang City, Hunan Province, China
- 

## 2. PRODUCT DESCRIPTION

---

Manganese Sulfate Monohydrate ( $\text{MnSO}_4 \cdot \text{H}_2\text{O}$ ) 31.8% is a high-purity, fully water-soluble manganese source specifically designed for controlled environment agriculture and hydroponic nutrient solutions. It appears as a light pink powder or granular material, ensuring consistent micronutrient delivery with minimal impurities.

---

### 3. TECHNICAL SPECIFICATIONS

Parameter	Typical Value
MnSO <sub>4</sub> · H <sub>2</sub> O Purity	≥ 98%
Manganese (Mn) Content	≥ 31.8%
Water Solubility	≥ 99%
Moisture	≤ 0.5%
Appearance	Light Pink Powder/Granular
Particle Size	100–200 mesh
Bulk Density	0.9–1.2 g/cm <sup>3</sup>
Iron (Fe)	≤ 0.02%
Calcium (Ca)	≤ 0.1%
Magnesium (Mg)	≤ 0.1%
Lead (Pb)	≤ 5 ppm
Copper (Cu)	≤ 5 ppm
Zinc (Zn)	≤ 5 ppm

### 4. KEY FEATURES

- **High Purity:** Contains ≥31.8% elemental manganese for precise nutrient dosing.
- **Superior Solubility:** ≥99% water solubility, ideal for liquid fertilizers and hydroponic systems.
- **Low Impurities:** Minimal Fe, Ca, and Mg levels to prevent nutrient antagonism and precipitation in irrigation lines.
- **Safety:** Strictly controlled heavy metal content (Pb, Cu, Zn) ensures crop safety and compliance.
- **Stability:** Consistent particle size for rapid dissolution and uniform mixing.

---

## 5. APPLICATIONS

---

- **Hydroponic Nutrient Solutions:** Essential for plant enzyme systems and photosynthesis.
  - **Fertigation Systems:** Compatible with drip irrigation and precision dosing equipment.
  - **Liquid Fertilizer Production:** Serves as a stable raw material for high-quality micronutrient blends.
  - **Greenhouse & Vertical Farming:** Supports controlled nutrient management for high-value crops.
  - **Soil Amendment:** Corrects manganese deficiencies in various soil types.
- 

## 6. PACKAGING & SUPPLY

---

- **Standard Packaging:** 25 kg kraft paper bags with PE inner liner.
  - **Bulk Supply:** Available in 20GP / 40HQ container shipments, palletized for export.
  - **Storage:** Store in a cool, dry, and well-ventilated area. Keep containers tightly closed to prevent caking from moisture.
  - **Samples:** Available upon request for formulation testing.
- 

**Disclaimer:** The information provided in this Technical Datasheet is based on our current knowledge and experience. Users should conduct their own tests to determine the suitability of the product for their specific purposes.