

TECHNICAL DATASHEET (TDS)

Granular Manganese Carbonate (MnCO₃) 43-44% Mn

Sustained-Release Nutrient Source for Fertilizer Blending & Soil Amendment

1. COMPANY INFORMATION

Company Name	BTLnewmaterial
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2. PRODUCT DESCRIPTION

Granular Manganese Carbonate (MnCO₃) is a high-quality, granular nutrient source designed for the fertilizer industry. It is specifically formulated to provide a sustained release of manganese, ensuring a continuous supply of this essential micronutrient to crops throughout the growing season. The granular form offers significant advantages over powder, including reduced dust during handling, improved flowability, and a consistent particle size distribution that prevents segregation when blended with other granular fertilizers (e.g., NPK blends).

3. KEY FEATURES

- **Sustained Nutrient Release:** Low water solubility ensures gradual dissolution in soil, providing long-term manganese availability and reducing leaching losses.
 - **Dust-Free Handling:** Granular structure minimizes dust during manufacturing, transport, and application, improving worker safety and environmental hygiene.
 - **Uniform Blending:** Consistent particle size (typically 2-4 mm) allows for seamless integration into bulk-blended fertilizers without segregation.
 - **High Purity & Safety:** Guaranteed 43-44% Mn content with strictly controlled heavy metal levels (Pb, As, Cd, Hg) to meet international agricultural safety standards.
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4. TECHNICAL SPECIFICATIONS

4.1 Chemical Composition

Parameter	Specification	Typical Value
Manganese (Mn)	43.0% - 44.5%	44.2%
Iron (Fe)	≤ 0.02%	0.015%
Sulfate (SO ₄)	≤ 0.05%	0.035%
Chloride (Cl)	≤ 0.05%	0.030%
Water Insoluble	≤ 0.1%	0.07%
Lead (Pb)	≤ 10 ppm	< 5 ppm
Arsenic (As)	≤ 5 ppm	< 2 ppm
Cadmium (Cd)	≤ 5 ppm	< 1 ppm
Mercury (Hg)	≤ 0.1 ppm	< 0.01 ppm

4.2 Physical Properties

Property	Description
Appearance	Pale pink to light brown granules
Particle Size (2-4 mm)	≥ 90%
Granule Hardness	≥ 15 N
Bulk Density	1.2 - 1.5 g/cm ³
Molecular Weight	114.95 g/mol
CAS Number	598-62-9
Solubility	Low water solubility; soluble in dilute soil acids

5. APPLICATIONS

- **Bulk Blending (NPK):** Ideal for mixing with granular NPK fertilizers to create balanced micronutrient-enriched blends.
 - **Sustained-Release Fertilizers:** Acts as a slow-release manganese source for long-cycle crops and specialty agriculture.
 - **Direct Soil Application:** Can be applied directly to soils requiring manganese correction, particularly in environments prone to nutrient leaching.
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6. PACKAGING & STORAGE

- **Standard Packaging:** 25kg, 50kg, or 1000kg (Jumbo) woven bags with moisture-resistant PE inner liners.
 - **Storage:** Store in a dry, cool, and well-ventilated warehouse. Protect from direct moisture, strong acids, and oxidizing agents.
 - **Shelf Life:** 24 months from the date of manufacture when stored under recommended conditions.
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Disclaimer: The information provided in this Technical Datasheet is based on our current knowledge and experience. Users are encouraged to perform their own

compatibility tests when blending with other fertilizers.