

# Technical Datasheet

## 1. Company Information

Parameter	Value
Company Name	BTLnewmaterial
Email	lixifirm@outlook.com
Phone	+8618273793022
Website	manganesesupply.com

## 2. Product Description

Metallurgical Grade MnO<sub>2</sub> for Manganese Steel Production is a high-purity manganese dioxide material used in metallurgical processes and alloy preparation. With typical MnO<sub>2</sub> purity above 85%, it serves as a reliable oxidizing and manganese source in steelmaking and smelting operations. The material supports stable reactions during high-temperature metallurgical processing.

## 3. Key Features

- High manganese dioxide purity supports stable metallurgical reactions during alloy formation.
- Controlled particle size distribution enables efficient melting and reaction in steelmaking furnaces.
- Strong oxidation capability assists in impurity control during high-temperature metal processing.
- Metallurgical Grade MnO<sub>2</sub> for Manganese Steel Production provides consistent manganese content for alloy adjustment.

- Low moisture content improves storage stability and handling during industrial use.
- Good thermal stability suitable for high-temperature smelting environments.

## 4. Technical Specifications

Parameter	Typical Value
MnO <sub>2</sub> Purity	85–92%
Particle Size	75–300 μm
Surface Area	8–20 m <sup>2</sup> /g
Moisture	≤ 2.0%
Bulk Density	1.8–2.3 g/cm <sup>3</sup>
Crystal Phase	Predominantly Pyrolusite

## 5. Applications

- **Manganese steel production** – Metallurgical Grade MnO<sub>2</sub> for Manganese Steel Production supplies manganese and oxidation capacity for alloy adjustment in steelmaking.
- **Thermite welding mixtures** – MnO<sub>2</sub> functions as an oxidizing component that supports high-temperature thermite reactions.
- **Ferroalloy smelting** – Provides a manganese source during production of specialized ferroalloys.
- **Metal refining processes** – Assists in oxidation reactions used to remove impurities in metallurgical systems.
- **Specialty alloy research** – Laboratory-scale metallurgy experiments use MnO<sub>2</sub> as a controlled oxidizing reagent.

## 6. Packaging & Supply

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The product is typically supplied in **25 kg fiber drums with inner PE liners** or **1-ton jumbo bags** for industrial use. Packaging is suitable for international export and long-distance transportation. Laboratory samples are available for metallurgical testing and process evaluation.