

# Technical Datasheet (TDS)

**Product Name:** High Purity Manganese Oxide (MnO) for Mn-Zn Ferrites Production  
**Manufacturer:** BTLnewmaterial **Website:** [manganesesupply.com](http://manganesesupply.com) **Email:** lixifirm@outlook.com **Phone:** +8618273793022

## 1. Product Description

High Purity Manganese Oxide (MnO) is a premium-grade raw material specifically engineered for the production of Mn-Zn ferrites. It provides a highly controlled manganese source, ensuring stable magnetic properties and consistent performance in electronic ferrite ceramics. This product is ideal for high-frequency magnetic cores and various soft magnetic applications.

## 2. Technical Specifications

Parameter	Typical Value
MnO Purity	$\geq 99\%$
Manganese (Mn) Content	$\geq 77\%$
Fe <sub>2</sub> O <sub>3</sub>	$\leq 0.05\%$
SiO <sub>2</sub>	$\leq 0.05\%$
Particle Size	200–325 mesh
Moisture	$\leq 0.5\%$
Bulk Density	1.5–2.5 g/cm <sup>3</sup>
Loss on Ignition	$\leq 1.0\%$

### 3. Key Features

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- **High Purity:**  $\geq 99\%$  MnO purity ensures precise stoichiometry in Mn-Zn ferrite systems.
- **Low Impurities:** Minimal levels of Fe, Si, and Ca to prevent interference with magnetic properties.
- **Uniform Particle Size:** Stable distribution (200–325 mesh) supports consistent mixing and sintering.
- **High Reactivity:** Optimized for solid-state ferrite synthesis.
- **Performance Stability:** Improves permeability and reduces magnetic variation across batches.

### 4. Applications

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- **Mn-Zn Ferrite Production:** Primary manganese source for spinel ferrite structures in inductors and transformers.
- **Soft Magnetic Materials:** Enhances high permeability and minimizes core loss in electronic components.
- **Ferrite Core Manufacturing:** Ensures compositional consistency during high-temperature ceramic sintering.
- **Electronic Ceramics:** Used in advanced magnetic devices requiring stable electromagnetic performance.
- **Powder Metallurgy:** Applied in oxide blending for specialized ceramic materials.

### 5. Packaging & Supply

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- **Standard Packaging:** 25 kg kraft paper bags with inner PE liner.
- **Bulk Options:** Jumbo bags (500–1000 kg) available upon request.
- **Shipping:** Palletized export packaging suitable for containerized FCL shipments.
- **Storage:** Store in a cool, dry, and well-ventilated area. Keep containers tightly closed to prevent moisture absorption.
- **Shelf Life:** 24 months under recommended storage conditions.

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