

Technical Datasheet (TDS)

Product Name: Black Mineral Pigment MnO₂ for Exterior Construction Paints

Manufacturer: BTLnewmaterial

Issue Date: March 12, 2026

1. Company Information

Company Name	BTLnewmaterial
Email	lixifirm@outlook.com
Phone/WhatsApp	+86 18273793022
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

2. Product Description

Black Mineral Pigment MnO₂ for Exterior Construction Paints is a high-performance inorganic manganese dioxide pigment specifically engineered for architectural and industrial coating formulations. With a typical MnO₂ purity of **75–90%**, this pigment provides a deep black coloration, exceptional weather resistance, and stable performance in demanding exterior paint systems. It is an ideal choice for masonry coatings, façade paints, cement-based systems, and protective building materials.

3. Key Features

- **Deep Black Coloration:** Provides a rich, natural mineral black tone for high-end architectural finishes.
 - **Superior Weather & UV Stability:** Maintains color integrity and prevents fading even under prolonged outdoor exposure.
 - **Alkali Resistance:** Highly stable in high-pH environments, making it perfect for cement and concrete applications.
 - **Excellent Dispersion:** Controlled particle size distribution ensures easy incorporation into both water-based and solvent-based systems.
 - **Thermal Stability:** Maintains physical and chemical properties across a wide temperature range.
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4. Technical Specifications

Parameter	Typical Value
MnO ₂ Purity	75–90%
Particle Size (D50)	5–25 µm
Surface Area	10–35 m ² /g
Moisture Content	≤ 1.0%
Bulk Density	0.8–1.2 g/cm ³
Crystal Phase	Pyrolusite-type MnO ₂
Appearance	Fine Black Powder

5. Applications

- **Façade & Masonry Coatings:** Long-lasting color for exterior walls and building surfaces.

- **Cement & Concrete Products:** Used in colored mortars, concrete blocks, and mineral plasters.
 - **Roof Coatings:** Enhances UV protection and durability for roofing materials.
 - **Industrial Protective Coatings:** Provides a durable mineral black base for infrastructure and steel protection.
 - **Decorative Building Materials:** Ideal for pre-cast concrete and architectural stone.
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6. Packaging & Supply

- **Standard Packaging:** 25 kg fiber drum or kraft paper bag with PE inner liner.
 - **Customization:** Particle size and purity can be adjusted upon request to meet specific formulation requirements.
 - **Samples:** Laboratory samples (100 g – 1 kg) are available for testing and evaluation.
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7. Storage & Handling

Store in a cool, dry, and well-ventilated area. Keep containers tightly closed when not in use to prevent moisture absorption. Avoid generating dust during handling.

Disclaimer: The information provided in this Technical Datasheet is based on our current knowledge and experience. It is the responsibility of the user to test the product for its suitability for the intended application. BTLnewmaterial reserves the right to update this information without prior notice.