

# Technical Data Sheet: Manganese Dioxide for Ceramic Glazes

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## Header Information

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- **Company Name:** BTLnewmaterial
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- **Website:** manganesesupply.com

## Product Description

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Manganese Dioxide for Dark Brown and Black Ceramic Glazes is a high-purity  $MnO_2$  pigment grade material designed for ceramic glaze coloration and tone adjustment. With controlled  $MnO_2$  content and fine particle size distribution, it ensures stable firing behavior and consistent dark brown to black glaze finishes. Suitable for oxidation and reduction kiln atmospheres.

# Technical Specifications

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Parameter	Typical Range
MnO <sub>2</sub> Content (%)	85.0 – 92.0
Mn Content (%)	54.0 – 60.0
Fe <sub>2</sub> O <sub>3</sub> (%)	≤ 2.5
Moisture (%)	≤ 1.0
Particle Size (D50)	5 – 15 μm
Residue on 325 Mesh (%)	≤ 0.5
Bulk Density (g/cm <sup>3</sup> )	0.8 – 1.1
Loss on Ignition (%)	5.0 – 10.0

## Key Features

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- Stable coloring performance for dark brown and black glaze systems
- Fine particle size ensures uniform dispersion in glaze slurry
- Low impurity levels minimize pinholes and firing defects
- Consistent MnO<sub>2</sub> content for repeatable kiln results
- Suitable for both oxidation and reduction firing

## Applications

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- Ceramic tile glazes – Provides stable dark brown to black surface coloration
- Sanitary ware glazes – Improves depth and uniformity of dark glaze finishes
- Tableware ceramics – Produces matte or glossy black tones depending on formulation
- Artistic pottery glazes – Ideal for glazes requiring high color intensity

## Packaging & Supply

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- 25 kg kraft paper bags with inner PE liner
- 500 kg and 1000 kg jumbo bags available
- Suitable for sea freight export and long-distance transportation
- Stable supply capacity for bulk industrial orders