

# Technical Datasheet: Activated MnO<sub>2</sub> for High-Drain Electronic Applications

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## 1. Product Description

Activated Manganese Dioxide for High-Drain Electronic Applications is a high-purity MnO<sub>2</sub> material engineered for electronic devices requiring rapid and stable discharge performance. The product features controlled crystal structure and high electrochemical activity, making it suitable for high-load power consumption environments.

## 2. Technical Specifications

Parameter	Typical Range
MnO <sub>2</sub> Purity	88–92%
Mn Content (Mn)	55–58%
Moisture (105 °C)	≤ 2.0%
Bulk Density	0.7–1.1 g/cm <sup>3</sup>
BET Surface Area	40–80 m <sup>2</sup> /g
pH (5% slurry)	3.5–5.5
Particle Size (D50)	5–20 μm
Crystal Form	γ-MnO <sub>2</sub> dominant

## 3. Key Features

- High electrochemical activity optimized for high-drain electronic applications.
- Stable discharge performance under continuous and pulsed load conditions.
- Controlled particle size distribution for consistent cathode processing.

- Low impurity content to reduce internal resistance and side reactions.
- Good compatibility with zinc-based and alkaline electrolyte systems.

## 4. Applications

- High-drain primary batteries using Activated Manganese Dioxide for High-Drain Electronic Applications to maintain voltage stability.
- Consumer electronics requiring fast energy release and reliable power output.
- Emergency and backup power devices operating under intermittent heavy loads.
- Industrial electronic components with high current density requirements.

## 5. Packaging & Supply

- **Standard packaging:** 25 kg kraft paper bags with PE inner liner.
- **Big bag option:** 500 kg or 1,000 kg jumbo bags available.
- Suitable for sea freight and long-term export storage.
- Stable supply for bulk orders with batch-to-batch consistency.

## 6. Customization & Technical Support

- Adjustable particle size, surface area, and activation level upon request.
- Technical support for battery formulation and cathode performance optimization.
- Engineering assistance available for high-drain electronic system requirements.