

## TDS: MANGANOUS DI OXIDE (MNO<sub>2</sub>) – 58-60%


### Applications:

Manganous Di oxide is used extensively in Dry Cell, Batteries and also as a pigment and as a precursor to other manganese compounds, such as KMnO<sub>4</sub>.

### Product Features:

- True to their compositions
- Free from all extraneous materials, toxins & dioxins
- Sustains stability
- Preserves purity

### Specifications:

CHEMICAL DETAILS		
ASPECTS	FACTS	
General Product Name	Manganous Di oxide (MnO <sub>2</sub> )	
Synonyms/Other Names	Manganese(IV) oxide, Pyrolusite	
HS Code	2820.10.00	
CAS Number	1313-13-9	
Form	Solid / Powder	
PHYSICAL DETAILS		
ASPECTS	FACTS	TEST METHODS
Appearance	Blackish Brown Powder / Clinkers	Visual
Molecular Weight	86.937	
Solubility	Water Insoluble/Acid Soluble	
Particle Size	100/200/300 mesh	
ELEMENTS	PARAMETERS	TEST METHODS
Manganese Dioxide as MnO <sub>2</sub>	58-60%	Potentiometric titration-Volhards
Manganese as Mn	39-40	
Iron as Fe	4% Max.	
Silica as SiO <sub>2</sub>	4% Max.	
Moisture	0.5-1.0%	
TRACE ELEMENTS	PARAMETERS	TEST METHODS
Arsenic (As)	80 ppm Max.	Atomic Absorption Spectrometer
Lead (Pb)	25 ppm Max.	Atomic Absorption Spectrometer
Cadmium (Cd)	10 ppm Max.	Atomic Absorption Spectrometer
Mercury (Hg)	BDL	Atomic Absorption Spectrometer
Nickel (Ni)	BDL	Atomic Absorption Spectrometer
Zinc (Zn)	BDL	Atomic Absorption Spectrometer
Dioxin and Dioxin like PCBs	Nil	Atomic Absorption Spectrometer

BDL – Below detecting level

**NOTE: We also manufacture as per customer specification.**

### Disclaimer:

#### Manganese Products Corporation,

579, Tharsa Road, Kanhan, Dist-Nagpur – 441401, Maharashtra (India)

Ph: +91-7102-236138, 236167, Fax: +91-7102-236176, 236040, e-mail: [info@groupshyamji.com](mailto:info@groupshyamji.com)

The information & data presented herein are typical values and should not be construed as specification. No warranty or guarantee expressed or implied is made regarding performance. The information & data are subject to change without prior intimation based on research & development work undertaken by the company.

Compliance Certificates & MSDS are available on request.



Visit us at [www.groupshyamji.com](http://www.groupshyamji.com)

R&D MNO<sub>2</sub> VER 03 – 2012