

Product Data Sheet

Manganese Ore - Imported, Zambian Origin (46% Grade)

Description

Description	This is a high-grade natural manganese ore of Zambian (African) origin, notable for its low iron and low phosphorus/sulphur content relative to typical Indian domestic ore. This clean chemistry profile makes it a preferred blending or standalone feedstock for ferro-manganese and silico-manganese production where tighter impurity control is required.
Applications	Ferro-manganese and silico-manganese production requiring low-impurity feedstock Blending agent to upgrade lower-grade domestic Indian ore Steelmaking deoxidiser/alloying raw material
Grade	Imported, Zambian Origin, ~46% Mn Grade
CAS No.	Natural mineral – primarily manganese oxides (pyrolusite/psilomelane), CAS 1313-13-9 (MnO ₂ , principal component)

Key Benefits

1. Notably low iron content (typically below 1.5% Fe) versus Indian domestic ore's typical 8-12% Fe – a genuine chemistry advantage for processes sensitive to iron contamination
2. Low phosphorus and sulphur content supporting cleaner ferro-alloy metallurgy
3. High MnO₂ content supporting efficient manganese unit yield
4. Consistent, well-documented batch analysis supporting reliable furnace charge planning

Chemical Analysis & Physical Data

Typical Specification

Parameter	Test Method	Unit	Typical Analysis (Reference Shipment)
Mn (Manganese)	Titration/XRF Method	wt%	46.12
Fe (Iron)	XRF Method	wt%	1.39
SiO ₂	XRF Method	wt%	14.86
Al ₂ O ₃	XRF Method	wt%	3.49
Sulphur (S)	Combustion/ Titration Method	wt%	0.016
Phosphorus (P)	Spectrophotometric Method	wt%	0.050
MnO ₂	Titration Method	wt%	60.88
Moisture (MOI)	Oven-Drying Method	wt%	1.88
Size Distribution (+150mm / 50- 150mm / -50mm)	Sieve Analysis	wt%	7.32 / 77.85 / 14.83

Packaging

Packaging Bulk (bulk carrier vessel shipment) – standard for imported ore, container/vessel loaded
Custom packaging available on request for smaller/specialised orders.

Storage & Handling

1. Store in a covered or designated open stockyard away from contamination
2. Minimise degradation from repeated handling/rehandling
3. Segregate by grade and origin to avoid mix-up during storage and loading
4. Follow standard bulk mineral handling and stockpile management practices

Quality Assurance

1. Each shipment is independently sampled and analysed at load port/discharge port, with results reported per the format shown (Desco/lab-certified analysis)
2. A shipment-specific Certificate of Analysis (COA) accompanies each consignment, reporting Mn, Fe, SiO₂, MnO₂ and size distribution against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party load-port inspection (SGS/Intertek/CIQ) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.