



Iron Ore

Industrial Grade

Chemical Name: Hematite (Fe₂O₃) or Magnetite (Fe₃O₄)

Chemical Formula: Fe₂O₃ or Fe₃O₄

Molecular Weight: 159.69 g/mol (for Fe₂O₃) or 231.53 g/mol (for Fe₃O₄)

Density: 5.0-7.0 g/cm³ (varies depending on the ore)

Specific Gravity: 4.9-5.3

Appearance

Dark brown to reddish-brown, dark grey

Properties

Iron ore mainly consists of iron oxides like hematite and magnetite, with varying colours from dark brown to reddish-brown. It can be magnetic, especially magnetite, and is dense and hard with a high iron content ideal for smelting.

Usage

Iron ore is primarily used to produce iron and steel, for usage in construction, manufacturing, and transportation. Steel made from iron ore is used in buildings, bridges, automotive parts, and machinery. It is also crucial in rail and shipbuilding, as well as in home appliances like refrigerators and washing machines.

Additionally, iron ore plays a role in the energy sector for heat-resistant machinery and is a key component in cement production.

Packing

loose in containers/bulk.

Chemical Analysis

Iron - Fe	58% basis; 57% rejection
Silicon dioxide - SiO ₂	9.00% max
Aluminium oxide - Al ₂ O ₃	1.00% max
Phosphorus P	0.09% max
Sulphur - S	0.50% max
Moisture	1.00% max
Sizing	10 - 60mm, 90% min