



Limonite

Industrial Grade

Chemical Name: Limonite, hydrated ferric oxide

Chemical formula: $(\text{FeO}(\text{OH}) \cdot n\text{H}_2\text{O})$

Molecular weight: 88.85 g/mol

Density: 2.7-4.3g/cm³

Specific gravity: 2.9-4.3

Appearance

Yellowish-Brown to Brown

Properties

Limonite is a yellow-brown, hydrated iron oxide ore with a hardness of 4 to 5.5. It forms through weathering of iron-rich minerals and is used as iron ore and for pigments like yellow ochre.

Usage

Limonite is widely used in several applications. Historically, it served as a major source of iron before the advent of higher-grade ores like hematite and magnetite, especially during the early days of iron smelting.

In addition to being an iron source, limonite is valuable for its earthy tones, which are used to produce natural pigments like yellow ochre and brown ochre, commonly applied in paints, dyes, and cosmetics.

Packing

1.5MT big bags in bulk, loose in containers/bulk.

Typical Properties

	GRADE 01	GRADE 02
Iron(III) oxide - Fe_2O_3	75%	82%
Chlorine - Cl	1.03%	0.42%
Silicon dioxide - SiO_2	7.50%	4.9%
Manganese(II) oxide - MnO	0.25%	0.28%
Barium Oxide - BaO	0.45%	0.43%
Aluminium oxide - Al_2O_3	1.25%	0.24%
Zinc oxide - ZnO	0.05%	0.04%
Sodium oxide - Na_2O	0.65%	0.28%
Potassium oxide - K_2O	0.19%	0.06%
Calcium oxide - CaO	0.69%	0.34%
Magnesium oxide - MgO	0.34%	0.44%
Phosphorus Pentoxide - P_2O_5	0.48%	0.33%
Titanium dioxide - TiO_2	0.18%	0.06%
Sulfur trioxide - SO_3	0.90%	1.20%
Loss On Ignition	10.20%	8.90%
Sizing	0-40 mm	0-40 mm