

Technical Data Sheet

Bauxite Ore (Lump & Gravel)

Description

Bauxite ore is primarily of alumina (Aluminum Oxide / Al_2O_3).

Here's a detailed breakdown:

1. Aluminum Production: This is the dominant application of bauxite. The Bayer process Converts Bauxite into alumina, which is then used in the electrolytic reduction process to produce metallic aluminum.
2. Refractory Materials: Bauxite is used to produce heat-resistant materials used in high-temperature industrial processes like steelmaking, cement production, and glassmaking.
2. Abrasive Materials: Bauxite is a key component in the creation of abrasives, such as alumina-based abrasives used for grinding, sanding, and polishing applications.
3. Cement Production: Bauxite can be added to cement to enhance its properties, such as Resistance to sulfate erosion.
4. Chemical Applications: Alumina derived from bauxite is used in various chemical processes and applications.
6. Bauxite is also used in the production of ceramics, glazes, and enamels.
7. Bauxite is an ingredient in some types of glass.
8. Bauxite is a versatile mineral with applications spanning from lightweight metals to high-temperature material and everyday products.

Typical Physical Analysis

Color: Reddish

Hardness: 1 -3 Mohs

Density and Specific Gravity 1 -3 g/cm³

Shipment lump & gravel size 0.5 – 3 inches

Typical Chemical Analysis

No.	Test Item / Parameter	Test Method / Protocol	Units	Standard Range	Test Result	Confirmation by SGS Pakistan
1	Alumina (Al_2O_3)	Gravimetric	%	50 -58	55.56	Certificate # 23050803
2	Silica (SiO_2)	Gravimetric	%	10 -20	18.32	Certificate # 23050803
3	Iron as (Fe_2O_3)	AAS Flame / ICP - OES	%	1 – 5	2.20	Certificate # 23050803
4	Titanium (TiO_2)	AAS Flame / ICP - OES	ppm	5 – 10	<8.0	Certificate # 23050803
5	Loss on Ignition (LOI)	Gravimetric	%	10 – 16	14.35	Certificate # 23050803
6	Calcium Oxide (CaO)	AAS Flame / ICP - OES	%	0.15 – 0.30	0.22	Certificate # 23050803
7	Bulk Density	Gravimetric	g/cm ³	1.35 – 1.42	1.39	Certificate # 23050803

Packaging

Ship in used first hand used jumbo bags, and 20 jumbo bags per container.

Origin: Pakistan