

Kaolin Specification

Description:

Natural kaolin powder is produced from the crushing and refining of kaolin. The product is characterized by high purity, whiteness, and fine particle size, suitable for ceramic, polymer, and paint industries.

Applications:

- **Ceramic & Porcelain Industry:** Used as a primary raw material in porcelain, ceramic tiles, sanitaryware, and tableware, providing whiteness, plasticity, and strength.
- **Paint & Coating Industry:** Acts as a functional filler and extender, improving brightness, opacity, viscosity, and suspension stability.
- **Rubber & Polymer Compounds:** Serves as a reinforcing filler in PVC, rubber, and polyester, enhancing tensile strength, smoothness, and surface finish.
- **Paper & Printing Industry:** Used as a coating pigment and filler to improve gloss, printability, and smoothness.
- **Agriculture & Fertilizers:** Carrier for micronutrients and pesticides, improving granule strength and dispersion.
- **Construction Materials:** Used in flooring, wall putty, and sealants to improve workability and whiteness.

Packing:

- Palletized bag in container
- 1 m³ jumbo bags in container

Health and Safety:

- Store in a dry area away from moisture.
- Avoid inhalation of dust; use suitable protective masks.
- Handle gently to avoid airborne dust.

Chemical Composition (XRF Analysis)

Component	wt%
SiO ₂	62
Al ₂ O ₃	27
Fe ₂ O ₃	<0.28
TiO ₂	<0.18
CaO	<0.3
MgO	<0.15
K ₂ O	1.5
Na ₂ O	<0.2
SO ₃	Trace
L.O.I (Loss on Ignition)	5

PHYSICAL PROPERTIES			
Property	Unit	Typical Range / Value	Test Method / Standard
Appearance	—	Fine white powder	Visual
Whiteness (Dry)	%	85 – 93	ISO 2469
Bulk Density	g/cm ³	0.35 – 0.55	ASTM D7481
Specific Gravity	g/cm ³	2.60 – 2.63	ASTM D854
pH (10% Slurry)	—	5.0 – 6.5	ASTM D1293
Moisture Content	%	≤ 1.0	ASTM D2216
Oil Absorption	g/100g	35 – 45	ASTM D281
Refractoriness	°C	1750 – 1800	ASTM C24
Plasticity Index	—	20 – 25	ASTM D4318
Hardness (Mohs)	—	2.0 – 2.5	—
L.O.I (Ignition Loss)	%	~5	ASTM D7348
Kaolin Raw & Powder		Applications	
			