



02 KAOLIN



PRODUCT DESCRIPTION

Kaolin is a naturally occurring hydrated aluminum silicate ($Al_2Si_2O_5(OH)_4$) with a fine particle size and excellent whiteness, brightness, and plasticity. It is widely used in ceramics, paper, paints, coatings, rubber, plastics, and various industrial applications.

CHEMICAL COMPOSITION (TYPICAL ANALYSIS)

COMPONENT	wt%
SiO ₂	46.0 – 55.0
Al ₂ O ₃	34.0 – 40.0
Fe ₂ O ₃	0.5 – 1.5
TiO ₂	0.2 – 0.6
CaO	0.1 – 0.6
MgO	0.1 – 0.4
K ₂ O	0.5 – 1.5
Na ₂ O	0.1 – 0.3
Loss on Ignition (LOI)	12.0 – 14.0
Moisture	≤ 1.0
Whiteness	80 – 92

i Chemical composition may vary slightly based on origin and grade.

PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	–	White to off-white powder / lumps
Specific Gravity	g/cm ³	2.50 – 2.65
Bulk Density	g/cm ³	0.45 – 0.65
Moisture Content	%	≤ 1.0
pH (10% Slurry)	–	6.0 – 7.0
Brightness	%	≥ 80
Whiteness	%	80 – 92
Oil Absorption	g/100g	35 – 60
Particle Size	µm	As per customer requirement
Color	–	White to off-white
Solubility in Water	%	≤ 0.5

APPLICATIONS

- CERAMIC INDUSTRY**
Used in ceramic bodies, glazes, and sanitaryware for plasticity, strength, and whiteness.
- PAPER INDUSTRY**
Used as a filler and coating pigment to improve brightness, smoothness, and opacity.
- PAINTS & COATINGS**
Enhances opacity, brightness, and rheology in paints, coatings, and water-based systems.
- RUBBER & PLASTICS**
Improves mechanical properties, dimensional stability, and brightness.
- COSMETICS & PERSONAL CARE**
Used in talc-free powders, creams, and personal care formulations.
- OTHER INDUSTRIES**
Used in adhesives, sealants, agriculture, textiles, and refractories.

AVAILABLE FORMS & PARTICLE SIZES



i Other sizes and specifications available upon request.

PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



CERAMIC INDUSTRY



PAPER INDUSTRY



PAINTS & COATINGS



RUBBER & PLASTICS



COSMETICS



ADHESIVES