KAOLIN CLAY POWDER

Monthly Capacity:
4000 Metric Ton

Chemical Composition:

Content	SiO_2	Al_2O_3	MgO	K_2O	Whiteness	Purity
	45% – 55%	35% – 38%	≤ 0.5%	1.5% – 3.0%	75% – 90%	95% – 99%

Packing Types / Sizes :

HDPE Bags

PP Bags

Jumbo Bags

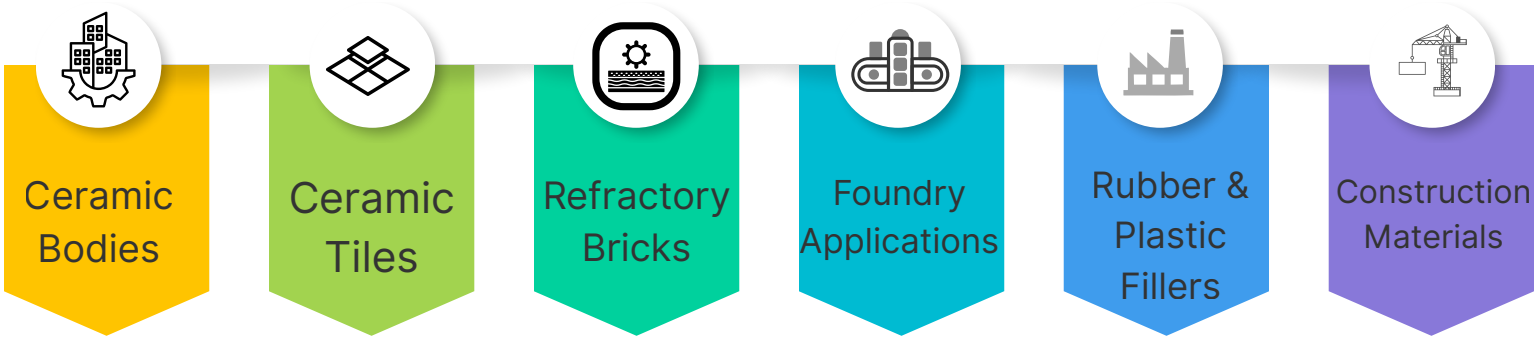
+91 8460592889
info@greentradeindia.com

KAOLIN CLAY POWDER

Physical & Thermal Properties:

Specification	Details	Specification	Details
Melting Point	1750°C – 1785°C	Thermal Conductivity	Low
Specific Gravity	2.55 – 2.65	Dimensional Stability	Excellent at high temperatures
Density	2.4 – 2.6 g/cm³	Porosity	Low to medium
Strength	Moderate (improves after firing)	Water Absorption	10% – 18%
Hardness	2 – 2.5 (Mohs scale)	Foam	Nil

Usses:



Physical Appearance:

- **Form:** Fine powder
- **Particle shape:** Plate-like (hexagonal flakes)
- **Agglomeration:** Low to moderate
- **Shape stability (dry):** Excellent
- **Flow nature:** Free-flowing to moderately cohesive

Particle & Structural Properties:

- **Primary particle size (D50):** 0.7–3.5 µm
- **Top cut (D90):** 5–10 µm
- **Bulk density (loose):** 0.25–0.45 g/cm³
- **Bulk density (tapped):** 0.45–0.75 g/cm³
- **Specific gravity (solid):** 2.58–2.63
- **Residue on 325 mesh:** 0.1–2.0 %

+91 8460592889
info@greentradeindia.com

KAOLIN CLAY POWDER

Moisture & Absorption:

Moisture
0.5–1.5 %

Water Absorption
40–65 %

Water of Plasticity
28–38 %

Oil Absorption
30–50 g/100 g

Mechanical Properties

Content	Data
Hardness (Mohs)	2.0–2.5
Green strength (dry MOR)	2–6 MPa
Dimensions stability	Good
Handling strength	Moderate
Abrasion loss	Low

Shrinkage / Contraction:

Content	Data
Drying contraction	2–5 %
Firing contraction	1–3 %
Total shrinkage	3–8 %
Shape retention	Better than raw clay

Thermal Properties:

Thermal Conductivity
0.2–0.4 W/m·K

Firing Temperature
1100–1300 °C

Thermal shock resistance
Good

Typical firing soak
30–90 minutes

+91 8460592889
info@greentradeindia.com

KAOLIN CLAY POWDER

Rheology & Slurry Properties

- **Viscosity (Lehmann):** 150–600 cps
- **Slurry density:** 1.60–1.75 g/cm^3
- **Runout time:** 18–40 sec
- **Dispersion behavior:** Excellent with low shear Deflocculation)

Deflocculation

- **Compatible deflocculants:** Sodium silicate, Sodium carbonate
- **Optimized addition:** 0.1–0.35 %
- **Typical working dosage:** ~0.2 %

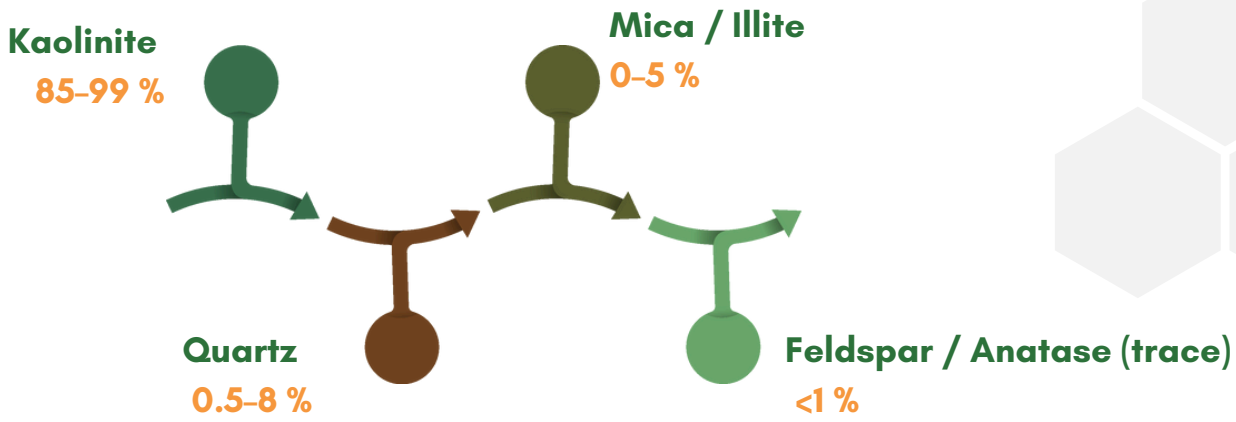
Chemical Properties:

pH (aqueous slurry)	Fluorine (F)	MgO	Water-soluble salts	Loss on ignition (LOI)
4.5–6.5	<0.01 %	0.05–0.5 %	<0.1 %	12–14 %

Optical / Color Properties:

- **Yellowness (b value)** 1.5–6
- **Whiteness** 80–94 %

Mineralogical Analysis (Typical)



+91 8460592889
info@greentradeindia.com