

KAOLIN

KAOLIN Kaolin is an important industrial mineral. Rocks rich in kaolinite are called kaolin. Kaolin is a type of clay obtained from granite rocks and used in various industrial applications. It contains a mineral called kaolinite

- Chemical Name** Kaolin (Kaolinite)
- Chemical formula** $Al_2Si_2O_5(OH)_4$
- Molecular Weight** 258.16.
- CAS No.** 1332-58-7
- Appearance** under a microscope, it shows a layered or platy structure
- Density** 2.16 - 2.68 g/cm³
- Texture** It ranges from 2 to 2.5 on the Mohs hardness scale
- Odor** odorless
- Color** (1200 C) white, gray, yellowish, or reddish. Pure kaolin is usually white.



SPECIFICATION TABLE						ANALYSIS TABLE		
Parameters Parametreler	Unit Birim	Specifications Değerler			Unit Birim	Results Sonuçlar	Method Metod	
		SKL 1	SKL 2	SKL 3		SKL 1	SKL 2	SKL 3
MgO	%	0,1 - 0,3	0,1 - 0,3	0,1 - 0,8	%			
SiO ₂	%	60 - 70	60 - 70	50 - 60	%			
CaO	%	max.0,3	max.0,3	max.0,3	%			
Fe ₂ O ₃	%	max.0,8	max.0,5	max.0,5	%			
Al ₂ O ₃	%	min.22	min.18	min.30	%			
TiO ₂	%	max.0,9	max.1,1	max.0,9	%			
Na ₂ O	%	max.0,3	max.0,3	max.0,3	%			
K ₂ O	%	max.0,4	max.0,4	max.0,4	%			
SO ₃	%	max.1,20	max.1,20	max.1,0	%			
A.Z.	%	max.12	max.12	max.12	%			
L	%	82 - 88	97 - 97	88 - 94	%			
a	%	0,1 - 0,3	0,1 - 0,3	0,5 - 0,9	%			
b	%	3,2 - 4,1	3,2 - 4,1	3,4 - 4,2	%			

- Applications** Kaolinite is a raw material for bricks, pottery, and tiles. It has played a vital role in the development of human civilization. Kaolinite is a natural product. It can be used in agriculture separately and in the food industry as a filler in foods like chocolate, mixed with pectin for anti-diarrheal purposes, as a paint extender, a reinforcing agent in rubber, and as a dusting agent in foundry operations.
- Packaging** Big bags, 25 Kg bags, 10 Kg bags or bulk
- Health & Safety** Kaolin is generally recognized as safe, but may cause mild irritation of the skin or mucous membranes. Kaolin products may also contain traces of crystalline silica, a known carcinogen if inhaled.
- Geo.Location** Eskisehir / Türkiye (Middle Anatolia)
- Chemical Composition** Kaolin composition consists of hexagonal crystals ranging in size from 0.1 to 10 micrometers. These crystals form in stacked layers, and this kaolinite structure partially gives the clay its desirable properties. Kaolin has a neutral pH level, making it ideal for use in pharmaceuticals, cosmetics, and industrial mixtures because it doesn't alter the product's chemical composition or promote bacterial growth.
- Particle Size** < 100 micron
< 74 micron