

## DIATOMITE

**Description:** Diatomite is a porous, low-density, sedimentary rock formed by the accumulation and compaction of diatoms which may comprise 90% or more of the dry weight of the rock. It is a sediment formed by the accumulation of fossil marine algae called diatoms. The skeletons of these algae consist of microscopic shells made of materials containing opal or silica. Diatomite is typically a mineral found in fine, white, powder, or granular form.

1. **Chemical Name** Diatomite
2. **Chemical formula** O<sub>2</sub>Si
3. **CAS No.** 61790-53-2
5. **Form** Solid
6. **Odor** Odorless
7. **Density** 0.47 g/cm<sup>3</sup> (0,4 - 0,6 g/cm<sup>3</sup>)
8. **Solubility** Insoluble in Water
- Molecular weight** 60.0843
9. **Melting point** 1400~1650°C
10. **Color** white, gray, yellowish, or brown
- Hardness** 5 - 6 on the Mohs scale



SPECIFICATION TABLE				ANALYSIS TABLE		
Parameters	Unit	Specifications	Unit	Analysis Results	Analiz	Method
Parametreler	Birim	Spesifikasyonlar	Birim	Sonuçları		Metod
MgO	%	1 - 3	%	1,70		
SiO <sub>2</sub>	%	55 - 80	%	61,20		
CaO	%	2 - 7	%	4,50		
Fe <sub>2</sub> O <sub>3</sub>	%	1 - 4	%	2,85		
Al <sub>2</sub> O <sub>3</sub>	%	7 - 14	%	9,40		
Na <sub>2</sub> O	%	0,1 - 0,5	%	0,10		
K <sub>2</sub> O	%	0,2 - 1,5	%	0,90		
MnO	%	0	%	0		
P <sub>2</sub> O <sub>5</sub>	%	0	%	0		
TiO <sub>2</sub>	%	0 - 0,1	%	0,10		
A.Z. (LOI)	%	20 - 30	%	22,05		

12. **Applications** The physical properties of diatomite have led to its use in many commercial applications, the most common being for the filtration of liquids or as a filler, for example, in paints. Other uses of diatomite include insulation (fire bricks), fine abrasion (in some toothpaste and polishes) and as a pesticide. Also used in water treatment plants, swimming pools. Used for soil improvement and can be added to animal feed to enhance digestion and bind toxins. is a natural material used in skincare products and mask formulations.
13. **Packaging** 25 Kg bags, big bags
14. **Health & Safety** Diatomite is generally considered a substance that does not harm human health. However, inhalation of the dust can cause lung irritation if inhaled.
16. **Geo.Location** Eskisehir / Türkiye ( Middle Anatolia)
17. **Particle Size** 45 - 100 micron