

599930 Tripoli, Rotten Stone, light

Synonyms: Diatomite, diatomaceous earth, kieselgur

Diatomite forms by the accumulation of the amorphous silica remains of dead diatoms (microscopic single celled algae) in lacustrine or marine sediments. Tripoli consists of about 70-90 % SiO₂, 3-12 % water and small amounts of organic constituents. These organic constituents are normally removed by calcination. During this process the powder can turn reddish (iron (III) compound).

The normal, calcinated diatomaceous earth is chemically very resistant and non-combustible. Tripoli burns at 1200-1700°C.

Tripoli is used in powdered form as polishing agent for metals, stones and likewise or for the manufacture of metal polishing agents.

Technical Data

Physical and Chemical Data:

Color:	yellowish-brown / pink
G.E. Degree of whiteness:	--
Bulk density:	190 g/l
Density:	370 g/l
Specific weight:	2.25
Refraction index:	1.43
Humidity (max % H ₂ O):	0.5 %
pH-Value (10 % aqueous suspension):	6.5
Permeability (millidarcy):	300
Sieve analysis (Tyler)	
% +105 mesh (> 105 µm)	2.5
% +324 mesh (> 44 µm)	11.4
Average particle size (µm):	15

Chemische Analyse:

SiO ₂	92.6 %
Al ₂ O ₃	3.8 %
Fe ₂ O ₃	1.6 %
CaO	0.6 %
MgO	0.3 %
Other oxides:	0.5 %
Ignition loss:	0.3 %

These are average values.