

Wollastonite Powder (Calcium Metasilicate)

Physical Properties

Various granulations are available. Primarily 10 X 100 mesh, 200 mesh X down and 325 mesh X down

Chemical Properties

Theoretical composition: CaO= 48.3% and SiO₂= 51.7%. The typical is: CaO= 47.0% and SiO₂= 50.0%

Typical Applications

As a source of silica and alkalis in the production of ceramics. Used to produce wall tiles, semivitreous bodies, ceramic insulators and glazes, thermoplastics, adhesives, and ceramic-bonded abrasives.

Wollastonite has been found useful as a soil conditioner and an additive to plant fertiliser for its reactivity in acid conditions. As opposed to lime or calcite, it offers long-term protection against the acidification of soils. In some countries, wollastonite has also found use as an inert carrier for pesticides and insecticides.

Description

Wollastonite is a white to yellowish-brown naturally occurring mineral. It has good strength, firing characteristics and ability to reduce crazing. It is comprised chemically of calcium, silicon and oxygen. It's molecular formula can be expressed as CaSiO₃ or as CaO.SiO₂. It is commonly referred to as calcium metasilicate according to the now obsolete classification of silicates as oxyacids of silicon, a salt of hypothetical metasilicic acid: H₂SiO₃. It has a theoretical composition of 48.28% CaO and 51.72% SiO₂.