

Mineral flame retardant for polymers EcoPiren® 3,5*

* The median particle size (D₅₀) of this product is 3,5 µm measured by laser diffraction. When measured by sedimentation technique the D₅₀ is 1,5 µm

Description

A fine white powder of magnesium hydroxide. Produced from selectively mined natural magnesium hydroxide (ground brucite) by milling and classification.

Application

Used as flame retardant filler for polymeric materials for achieving of high oxygen index (LOI), and for ensuring of the absorption of smoke and toxic gases. Typical application is HFFR and PVC cable jacketing and insulation.

Properties

Parameter	Specification	Typical
MgO/Mg(OH) ₂ , %	64.0/92.8 min.	64.8/94.0
CaO, %	2.3 max.	2.1
SiO ₂ , %	1.3 max.	1.2
Fe ₂ O ₃ , %	0.13 max.	0.11
Loss on ignition at 950 °C, %	30-32	31
Specific gravity**, g/cm ³	2.4	
Loose Bulk Density, kg/m ³	300 min.	350
Humidity, %	0.5 max.	0.3
Particle Size Distribution, µm:		
Laser diffraction (Malvern Mastersizer)	D ₁₀	0.8-1.3
	D ₅₀	3.0-4.0
	D ₉₇	14-19
Sieve residue 45µm, %	0.1 max.	
Specific Surface Area (BET)***, m ² /g	11-13	
Whiteness, CIE method	86 min	88.5
Tint, CIE method	0.5 max.	0.1
Product appearance	White powder	

** reference value for brucite mineral

*** measured on request

Storage

The shelf life is limited by moisture pick-up during storage, which is 0.5% max. When stored in dry conditions and with the packaging intact the shelf life is min. 4 months and max. 12 months from the time of delivery. We recommend to check the moisture content before usage if the product is stored for more than 4 months. Opened bags should be resealed immediately

Packing

Polypropylene bags with polyethylene liner, big bags

Safety

Refers to low-hazard substances; fire- and explosion-proof, non-toxic

Transportation

Transported by all modes of transport in accordance with the rules of transportation of goods that operate in this mode of transport