

Mineral flame retardant for polymers Ecopiren® 3,5NP*

*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.

	Indicator	Specification	Typical value	
Properties	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, %	30-32	31	
	Loose Bulk Density, kg/m ³	300 min.	350	
	Humidity, %	0.5 max.	0.3	
	Particle Size Distribution, µm:			
	Laser diffraction	D ₁₀	0.8-1.3	
	(Malvern Mastersizer)	D ₅₀	3-4	
		D ₉₇	<30	
	Surface Area Range, m ² /g		11-13	
	Whiteness, CIE method		86 min.	88.5
	Surface treatment by alkyl silane, %		1	
Product appearance		White powder		
Storage	The shelf life is 12 months from the time of delivery, when stored in dry place and while maintaining the tightness of packing. Opened bags should be resealed immediately			
Packing	Polypropylene bags with polyethylene liner, big bags			
Security	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 operates in this mode of transport			