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Vertex® 100 ST1

MAGNESIUM HYDROXIDE

DESCRIPTION

Vertex® magnesium hydroxide products provide excellent fire retarding and smoke suppression performance for the thermoplastic or crosslinked polymer compounds. At 330°, they decompose in an endothermic reaction to form water and magnesium oxide.

Vertex 100 ST1 is a fatty acid-treated product that provides superior fire performance and enhanced mechanical properties when used to make fire-rated polymeric compounds. The surface treatment promotes uniform dispersion of the magnesium hydroxide in the polymer used and enhances compounding and processing throughput, providing enhanced compound performance especially for high-loading applications in halogen-free polyolefins.

GENERAL PHYSICAL AND CHEMICAL PROPERTY DATA

Physical Property	Unit	Typical Value
Specific Gravity	g	2.36
Color		White
Refractive Index		1.58
Hardness	Mohs	2.5
325 Mesh Residue	%	≤0.5
Median Particle Size by Sedigraph	Microns	1.1
Median Particle Size by Laser Light Scattering	Microns	1.5
Specific Surface Area (BET)	m^2/g	14
Free Moisture @105ºC	%	≤0.5

Chemical Property	Unit	Typical Value
Magnesium Hydroxide, $Mg(OH)_2$	%	≥99 (untreated base)
Calcium	%	≤0.6
Chloride	%	≤0.3
Iron	%	≤0.08
Loss on Ignition (1200°C)	%	≥31 (untreated base)

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