FIRE RETARDANT ADDITIVES

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Hymod® M9400 SF
Surface-Treated Aluminum Hydroxide for PVC Plenum Jackets

DESCRIPTION

Hymod® 9400 SF ATH is a specialty grade of surface-modified aluminum hydroxide for flame retardance and smoke suppression in PVC plenum jacket compounds. This product is used to reduce moisture pick-up and improve dynamic thermal stability (DTS) in highly filled PVC compositions for plenum cable jacketing.

General Chemical and Physical Property Data

Constant Physical Properties

Parameter	Method	Value
pH	ASTM D-1208	9
Hardness, Mohs	Handbook of Chem. & Physics	2.5 – 3.5
Solubility, g/100g	Handbook of Chem. & Physics	Insoluble
Particle Shape	Microscopy	Hexagonal Platelet
Specific Gravity	Handbook of Fillers and Reinforcement for Plastics	2.42
Refractive Index	Handbook of Fillers and Reinforcement for Plastics	1.57
CTE, 10^{-6}/ºC	Handbook of Fillers and Reinforcement for Plastics	4 - 5
Thermal Conductivity, W/(m·K)	Handbook of Fillers and Reinforcement for Plastics	0.84
Specific Heat, cal/(g·ºC)	Handbook of Fillers and Reinforcement for Plastics	0.19
Dielectric Constant, □ = D/E	Handbook of Fillers and Reinforcement for Plastics	7
Loss on Ignition (550ºC), %	Calculated	34.6%

Typical Physical Properties

325 Mesh Residue, %	FQA 3015	0.01
Median particle Size, µm	FQA 3065	1.0
TAPPI Brightness	FQA 3021	95
BET Surface Area, m^2/g	BET	5.0

Typical Chemical Analysis

Parameter	Hymod M9400 SF
$Al(OH)_3$, %	99.6
SiO_2, %	0.005
Fe_2O_3, %	0.006
Na_2O, % soluble	0.025

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