

58942 Aluminium Hydroxide, fine

Aluminium hydroxides are white crystalline powders and are used as fillers to rubber, plastics fibres and papers to get high flame-retardation, low smoking, high electro-insulation, high thermal conductivity and good opacities.

Conventional flame-retardants include halogenides, phosphides, antimony trioxide, and so forth, but some of them produce toxic gases upon heating and some are relatively expensive. In contrast, aluminium hydroxide has several advantages over conventional flame-retardants: it produces only water vapor and few fumes, when burnt; supply is dependable and inexpensive; and it is of uniform quality.

Physical and Chemical Properties

Qualitative data		Aluminiumhydroxide fine
Chemical composition	Moisture	0.15 %
	Al(OH) ₃	99.6 %
	Fe ₂ O ₃	0.01 %
	SiO ₂	0.008 %
	Na ₂ O	0.32 %
Particle	Mean particle size	1.0 µm
	+325 Mesh	< 0.1 %
Bulk density	Loosed bulk density	0.25 g/cm ³
	Packed bulk density	0.6 g/cm ³
DOP Oil absorption		59 ml/100 g
Whiteness		96 %
pH (30% slurry at room temperature)		9 - 10
True specific gravity		2.42
Refractive index		1.57
Hardness (Mohs)		3