

## **ALFRIMAL 106**

### **Product Properties:**

The new generation halogen-free flame retardant **ALFRIMAL 106** stands for an aluminum hydroxide combining highest whiteness with a small particle size. It fits into the polymer matrix exactly like 2 µm mineral fillers. Because of precise top cut at 5,5 µm is this material especially suitable as flame retarding filler for plastics and rubber. In case of fire are generated no toxic or corrosive gases, what make a contribution to the ecological impact of this material.

## **WATER BOOSTER AT FIRE IGNITION**

### **Key Benefits at a glance:**

- Finely ground ATH
- Acts as flame retardant (HFFR)
- Extender for finely precipitated ATH
- Cost saving by production
- Rheology behavior like standard filler
- Exchange of 2 µm standard fillers 1:1
- Low decomposition temperature
- Narrow decomposition temperature gap
- Synergist for FRs
- Independent on pH



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The data indicated on our data sheets and printed matters represent average values and are not legally binding.

## ALFRIMAL 106

### Introduction:

More and more products on the market have to be safe in case of fire enabling people to leave the area before an initial fire propagates. Such requests do exist for building products of all kinds from single room apartments to multi-story skyscrapers. Keeping the plastics or rubber cushion is the key driver to develop flame retardants neither disturbing the mixing and processing nor the color, surface or grip, but which act as fire extinguisher immediately in case of ignition.

### Chemical and Physical Data:

Composition:	Ultra finely milled aluminum hydroxide
Activity:	100% active by weight
Color:	White
Form:	Fine powder
Average particle size:	2 $\mu\text{m}$
Whiteness, Ry	98
Sieve Residue > 20 $\mu\text{m}$ :	0 %
Specific surface BET:	7 $\text{m}^2/\text{g}$
Residual moisture content	0,5 %
Bulk Density:	600 $\text{kg}/\text{m}^3$

### Application examples:

#### **Cables:**

- High quality bedding compounds
- Standard grade sheathing compounds
- Water booster in HFFR compounds

#### **Rubber:**

- Standard FR in black rubber products
- Standard FR in white rubber products
- Specialty water booster in colored specialties

#### **Elastomeric foam:**

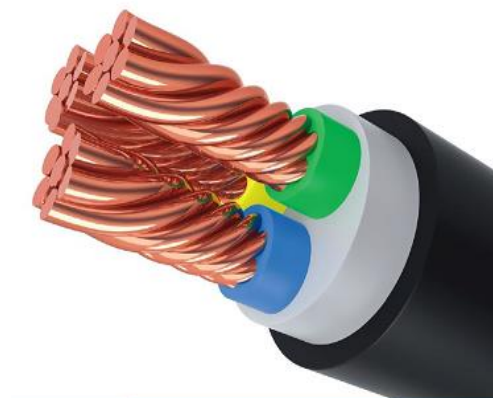
- Water booster in nitrile/PVC and HFFR foams

#### **Thermosets:**

- Water booster in FR systems

#### **Solid surface:**

- Water booster in combination with other ATH-grades



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