

## ***FINEST ALFRIMAL® QUALITIES***

### **Product Properties**

Actual market situation with strong development of IT- and alternative energy branch demands that products, especially electronics and machines have to be safe in case of fire, thus allowing people to leave the conflagration area before a fire propagates. Keeping the plastics or rubber materials intact is the key driver to develop highly efficient, very fine flame retardants neither disturbing the mixing and processing nor the color, surface or grip, but acting as fire extinguisher immediately in case of ignition. Broaden applications area exist also for these products in building products of all kinds from single room apartments to multi-story skyscrapers and office buildings.

## ***FINEST FIRE RETARDANT FOR YOUR CABLE***

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

- Finest particle-sized ATH
- Acts as flame retardant (HFFR)
- Alternative for finely precipitated ATH
- Cost saving by production
- Rheology behavior like standard filler
- Low decomposition temperature
- Narrow decomposition temperature gap
- Synergist for FRs
- Independent on pH



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## FINEST ALFRIMAL® QUALITIES

### Introduction

The finest qualities of new halogen-free flame retardant **ALFRIMAL** stand for an aluminum hydroxide combining highest whiteness with a very small particle size between 2 and 4 µm. Because of precise top cut this material is especially suitable as flame retardant for plastics and rubber. Additionally due to low particle size these products are suitable for cable applications and fit into the polymer matrix of jacket. No toxic or corrosive gases are generated in case of fire, what contributes to the ecological impact of this material.

### Chemical and Physical Data

Product	D <sub>50</sub> SediGraph [µm]	Sieve residue 20 µm [%]	Whiteness Ry	Spec. surface Blaine [m <sup>2</sup> /g]	Moisture [%]	Bulk density (untamped) [g/ml]
<b>ALFRIMAL 104</b>	4	< 0.1	97	5	0.5	0.6
<b>ALFRIMAL 105</b>	3	< 0.1	97	6	0.5	0.6
<b>ALFRIMAL 106</b>	2	0	98	7	0.5	0.6

### 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 foams:**

- Water booster in nitrile/PVC and HFFR foams

#### **Solid surface:**

- Water booster in combination with other ATH-grades

