

## ***ALFRIMAL® - MADE FOR FIRE PROTECTION***

### **Product Properties**

**ALFRIMAL** stands for a big family of many different types of aluminium hydroxide based flame retardants suitable for a wide range of plastics and rubber articles. The particle size distribution is optimized for each application in all kind of organic binders. The improvement of the technological properties like mechanical properties and surface characteristics are improved by **ALFRIMAL**.

## ***WITH WHOLE POWER AGAINST FIRE***

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

- Chemically pure ATH
- Acts as flame retardant (HFFR)
- Optimized PSD per application
- High filling is possible
- Improved processability of high filled systems
- Superior mechanical properties
- Improved surface properties



V2 / 2020-08-24 / OK

### ***Alpha Calcit Füllstoff Gesellschaft mbH & Co. KG***

D-50971 Köln Postfach 50 11 06

Telefon: +49 2236 8914-0

Email: [info@alpha-calcit.de](mailto:info@alpha-calcit.de)

D-50997 Köln Otto-Hahn-Str. 9-11

Telefax: +49 2236 40644

Internet: [www.alpha-calcit.de](http://www.alpha-calcit.de)

Die in unseren Informationen und Druckschriften angegebenen Werte sind Durchschnittswerte ohne Rechtsverbindlichkeit.  
The data indicated on our data sheets and printed matters represent average values and are not legally binding.



## ALFRIMAL® - MADE FOR FIRE PROTECTION

### Introduction

**ALFRIMAL**, based on special aluminium hydroxide with optimized particle size distribution, is especially suitable as flame retardant for plastics, resins and rubber. Very high loadings can be achieved. In contrast to conventional flame retardants, no toxic or corrosive gases are generated by **ALFRIMAL** in case of fire. Smoke temperature as well as smoke density are considerably reduced.

### Chemical and Physical Data

Product	D50 CILAS [µm]	Sieve residue [%]	Whiteness Ry	Spec. surface Blaine [m <sup>2</sup> /g]	Moisture [%]	Bulk density (untamped) [g/ml]
<b>ALFRIMAL 443</b>	6	45 µm < 0.1	96	5	0.4	0.7
<b>ALFRIMAL 444 S</b>	10	45 µm < 0.01	96	3	0.1	0.7
<b>ALFRIMAL 446</b>	11	90 µm < 0.1	96	4	0.3	0.8
<b>ALFRIMAL 447 S</b>	15	160 µm < 0.01	95	2	0.1	0.9
<b>ALFRIMAL 448</b>	15	160 µm < 0.5	95	1.5	0.3	0.9
<b>ALFRIMAL 449</b>	17	200 µm < 0.1	94	1	0.3	1.3
<b>ALFRIMAL 449 S</b>	17	125 µm < 0.1	94	1.5	0.1	1.0

### Application examples

#### **Building panels:**

- Higher filling grades of polymers
- Reduced smoke development

#### **Plastic structural elements:**

- High quality compounds
- Special FR for different applications

#### **Hard components:**

- Standard FR in white products
- Standard FR in colored products

