Alpha Calcit Application Leaflet



ALFRIMAL® 104 HS

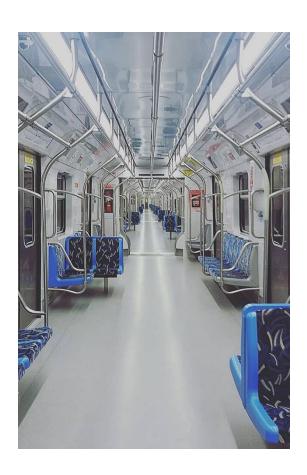
Product Properties

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. *ALFRIMAL 104 HS* is a new aluminium hydroxide quality, which is especially suitable as flame retarding filler for plastics, rubber articles and coatings. In contrast to conventional *ALFRIMAL* products, the surface of *ALFRIMAL 104 HS* is water-repellent, to apply this material in a wide spectrum of organic-based compounds, where hydrophobic interactions are possible.

WATER BOOSTER AT FIRE IGNITION

Key Benefits at a glance

- Water-repellent ATH
- · Finely milled
- Hydrophobic interactions with matrix
- Acts as flame retardant (HFFR)
- Improved rheological behavior
- Narrow decomposition temperature gap
- Synergist ATH for other field
- Broaden application field



V3 / 2020-09-04 / OK



Alpha Calcit Application Leaflet



ALFRIMAL® 104 HS

Introduction

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. Due to the high specific surface of 5 m²/g and a top cut at 20 μ m *ALFRIMAL 104 HS* is a new benchmark on the market of fine particle-sized ATH grades. Being water-repellent, the product is suitable for all kind of applications, in which other aluminium hydroxide fillers cause problems due to their hydrophilic surface, e.g. special cable compounds and sensitive systems, where hydrophobic interactions are necessary.

Chemical and Physical Data

Composition: Fine particle-sized aluminium hydroxide

Surface: Water-repellent

Color: White

Form: Fine powder

Average particle size: $4 \mu m$ Sieve Residue > 20 μm : < 0,1 %Specific surface BET: $5 m^2/g$ Bulk Density: 600 kg/m^3

Application examples

Cables:

- High quality bedding compounds
- Special sheathing compounds
- Water booster in HFFR compounds

Rubber:

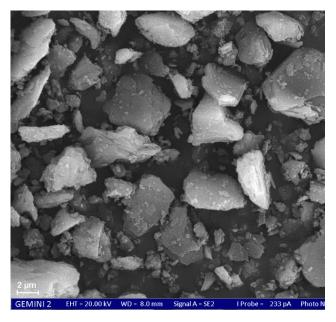
- Standard FR in black rubber products
- Standard FR in white rubber products
- Specialty water booster in corporate colored specialties

Elastomeric foams and thermosets:

- Water booster in nitrile/PVC
- Water booster in HFFR

Elastomeric foams and thermosets:

Water booster in HFFR



V3 / 2020-09-04 / OK

Alpha Calcit Füllstoff Gesellschaft mbH & Co. KG

D-50971 Köln Postfach 50 11 06 D-50997 Köln Otto-Hahn-Str. 9-11 Telefon: +49 2236 8914-0 Telefax: +49 2236 40644 Email: info@alpha-calcit.de Internet: www.alpha-calcit.de

