

ALUPREM[®] SR-100 MES

Aluminum Oxihydrate

Description

ALUPREM SR-100 MES is designed for use as a cost effective, high temperature flame retardant and smoke suppressant / char promoting filler for application in halogen-free polymer systems. Due to its high temperature stability, it can be used to replace Magnesium Hydroxide in extreme temperature processing applications, such as Engineered Thermoplastics and Polyolefins.

ALUPREM SR-100 MES is ideal for use as a flame retardant synergist in partially replacing (10-20% of loading) other FR products such as Magnesium Hydroxide, ATH or Phosphorus to achieve the most stringent UL 94 VO flame retardant rating. It offers excellent processing behavior, low alkalinity & moisture / good resin compatibility and improved mechanical properties.

SR-100 MES

CHEMICAL ANALYSIS (Typical)

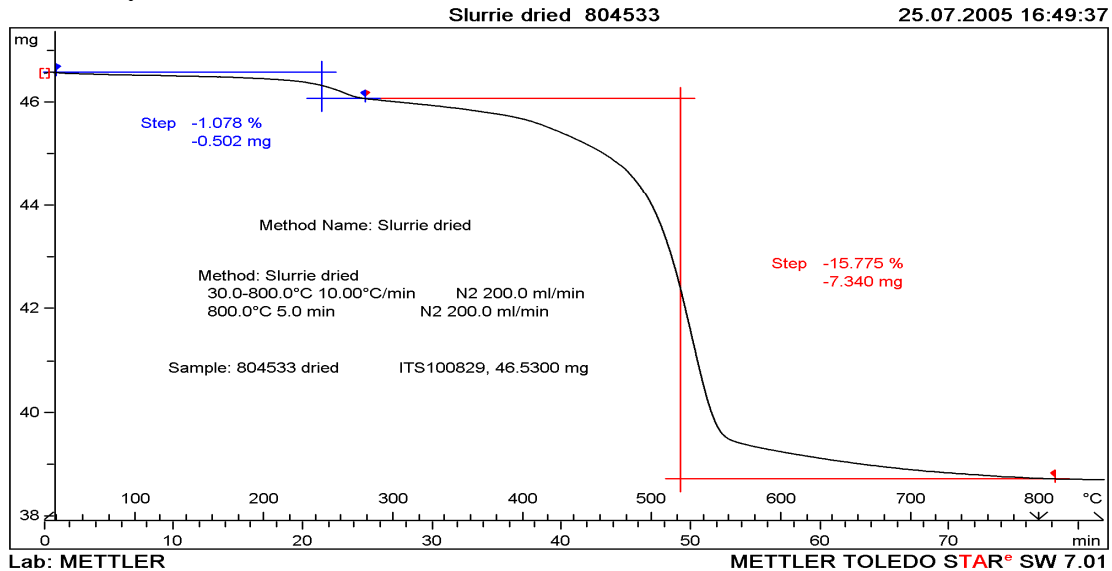
AlO(OH) ₃ content, %	None
AlO(OH), %	≥ 99.1
Na ₂ O, %	≤ 0.08
SiO ₂ , %	≤ 0.02
Fe ₂ O ₃ , %	≤ 0.03
Moisture Content (105° C), %	< 0.1
Loss on Ignition (LOI @ 1200° C), %	17

PHYSICAL ANALYSIS (Typical)

Particle Size (laser, Sympatec) - d ₅₀ , (µm)	2 - 4
Specific Density, (g/cm ³)	3.0
Brightness	93.0
Bulk Density, (kg/m ³)	700
Conductivity, (µS/cm ²)	< 100
Hardness (Mohs)	4.5 – 5.0

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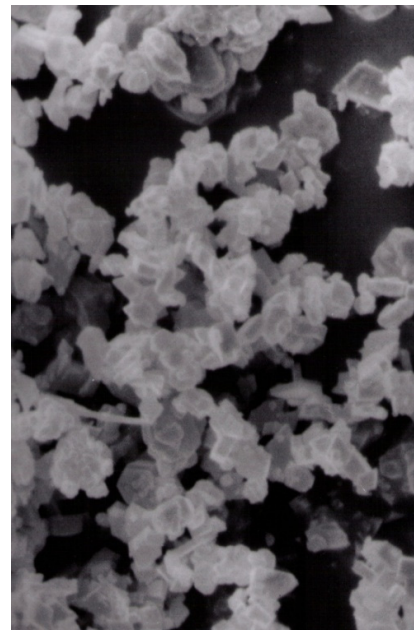
TGA Analysis:



ALUPREM SR-100 MES gradually releases its bound water between 300-550°C (as indicated above), the phased release profile enhances the compound flame resistant performance.

Performance Benefits Include:

- High temperature stability >300°C
- Excellent dispersion / high loadings
- Good resin compatibility
- Minimal effect on curing
- Higher scratch/abrasion resistance
- Lower chalking
- Improved mechanical properties
- High heat capacity
- Low electrolytes / good electrical insulation
- Synergistic effect with other flame retardants
- Low moisture pick-up
- High brightness
- Faster gel time & low blushing (solid surface)



The information herein is believed to be correct and reliable; however, no warranty is given concerning the accuracy of these data, merchantability or fitness for a particular use.