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FIRE RETARDANTS

VERSAMAG™ TECHNICAL GRADE -MAGNESIUM HYDROXIDE-

DESCRIPTION:

Versamag (magnesium hydroxide) is an inert filler, flame retardant smoke suppressant for latex foam, elastomeric goods, epoxies, reinforced polyesters, phenolics, and urethane foam.

Magnesium hydroxide releases its 31% water of crystallization when heated to above 325°C as water vapor. The high temperature of water release allows for processing of engineered plastics without moisture entering into the molding operation. The resulting endothermic reaction cools the product below flash point, reducing the risk of fire. The vapor released also helps reduce smoke, an additional advantage of this type flame retardant. Char formation is also improved over alumina trihydrate.

Magnesium hydroxide also functions as an excellent acid acceptor in a chlorinated polyethylene (CPE) non-peroxide, thiadiazole cure system providing better scorch time as well as faster cure than magnesium oxide. Mg(OH)₂ has also been shown to prevent premature scorch vs. MgO in Hypalon formulas.

TYPICAL PROPERTIES - TECHNICAL GRADE POWDER:

Assay, Dried %.....	96
Loss on Ignition.....	30.5%
Surface Area m ² /gm.....	18
Mean Particle Size.....	2 microns
Calcium Oxide.....	1.2%
Soluble Salts %.....	0.4%
Moisture (110°C).....	< 1%
Specific Gravity.....	2.36
Color & Form.....	white powder
Residue on a 325 Mesh Screen.....	0.20%
Apparent Bulk Density.....	0.2-0.3 g/ml

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