



MAGNESIUM HYDROXIDE

The increasing awareness of the dangers of fire and smoke associated with the use of plastics has led to legislation and standardization of plastic formulations with regard to flame retardancy and smoke suppression. The corrosive and poisonous nature of the gases released in the combustion of plastics incorporating halogen-bearing materials has led to a demand for non-halogen flame retardant systems.

Magnesium Hydroxide Solid Solution (FRMHSS) is known to exhibit better flame retardancy and acid resistance than Magnesium Hydroxide itself. This property is due to ability of (FRMHSS) to dehydrate at a temperature (300°C) that is lower than that of Magnesium Hydroxide (340°C). Magnesium Hydroxide (FRMHSS) is an efficient non-halogen flame retardant and smoke suppressant in many polymers including polyethylene, polypropylene, polystyrene, ABS and PVC. The flame-retardant effect is achieved by the endothermic decomposition of Mg (OH)₂ with resultant cooling by the release of water vapour.

Plastic applications require Magnesium Hydroxide with a crystalline structure, which has minimum distortion on reducing particle size. This ensures minimum adverse effect on the physical characteristics of the polymer in which it is incorporated. Magnesium Hydroxide (FRMHS) generated in our process meets this requirement to provide ideal flame-retardant products. Magnesium Hydroxide (FRMHS) is available with various surface treatments for compatibility with the polymer required. Customized surface treatment can be provided in cooperation with the customer.

Physical Specification	
Colour	Light Green
Specific Gravity	2.3
Refractive Index	1.57
Specific Gravity	2.74
Oil Absorption	20 gm/100 gm
Refractive Index	1.59
Chemical Specification	
MgO	67.4 %
Fe ₂ O ₃	0.02 %
CaO	0.2 %
LOI	31 %
Particle Size % on mesh 325	0.3 %

Material Safety Data Sheet is available on request. Kindly contact our product team at info@medshieldindia.net