บริษัท ท็อปส์ ซินเนอร์จิสท์ จำกัด
TOPS SYNERGIST CO.,LTD.

TECHNICAL DATA SHEET

TOPS FR-101

PRODUCT DESCRIPTION

TOPS FR-101 Aluminium Trihydrate (ATH or hydrated alumina) is a non-toxic, non-corrosive, flame retardant and smoke suppressant utilized in elastomeric applications.

It is the most frequently used flame retardant in the world. ATH is a very effective flame retardant due to its thermodynamic properties which absorb heat and release water vapor. Aluminium trihydrate releases its 35% water of crystallization as water vapor when heated above 205°C. The resulting endothermic reaction cools the product below flash point, reducing the risk of fire and acts as a vapor barrier to prevent oxygen from reaching the flame. Typical loadings vary from 20 phr to 150 phr. Because many polymers like polyethylene and polypropylene process above 200°C, these polyolefins should use magnesium hydroxide as a flame retardant filler since its water of hydration releases at approximately 325°C.

TYPICAL PROPERTIES

$Al(OH)_3$	≥99.7 %
SiO_2	≤0.03 %
Fe_2O_3	≤0.02 %
Na2O	≤0.3 %
Moisture	≤0.3 %
Whiteness	≥96 %
pH	7.5-9.8
Particle Size (D50)	1~2 micron