

Enhancing Flame & Smoke-Free Polymer Performance



ALUMINIUM TRIHYDRATE (Precipitated, Synthetic, Ground)
MAGNESIUM HYDROXIDE
FIRE RETARDANT SYNERGIST (Antimony Trioxide)
SMOKE SUPPRESSANT
ZINC BORATE

About Us

ATHYS™ has 20 years of expertise in green chemistry for vinyl and non-vinyl polymers and the chemical industry. Our highly expert team, R&D wings, and technology meet the best quality and performance standards that the global market needs. Our expertise has resulted in advancing the art in specialty **ALUMINIUM TRIHYDRATE (Precipitated, Synthetic, and Ground) MAGNESIUM HYDROXIDE, FIRE RETARDANT SYNERGIST (ATO), SMOKE SUPPRESSANT, and ZINC BORATE**. ATHYS™ would in due course add new products to provide **FIRE RETARDANT and SMOKE RELATED SOLUTIONS** for vinyl and non-vinyl polymers.

Our Innovation

Our experience and expertise in polymer additives, processing, and knowledge of market trends allows us to understand customer problems and their specific requirements in meeting international standards inspiring innovation and customized solution. We do not market our products to customers but we provide value-added solutions our partner with our customers in their business growth

Quality

The QA/QC instated for our entire operations facilitates meeting the best norms of our products. We have a team of highly skilled professionals engaged in the task of implementing QA/QC. Many of our overseas clients have independently reviewed our quality procedure and have expressed complete satisfaction. We believe in the philosophy “**Quality & consistency is the key**”

Product Range for PVC and Polymer Application

ALUMINIUM TRI HYDRATE							
PRODUCT RANGE	APPEARANCE	PARTICLE SIZE D 50 (µm)	THERMAL STABILITY	OIL ABSORPTION %	BULK DENSITY g / cm ³	APPLICATION	BENEFITS
PRECIPITATED ATH							
FR 13300	White de-agglomerated powder	1.3 - 1.6	220 °C	28	0.4	Specially precipitated ATH designed for PVC cable compounds and ZHFR compounds	spherical particle size fully de-agglomerated powder for better mixing and improved compatibility of polymer compounds
FR 12400	White de-agglomerated powder	1.4 - 1.7	220 °C	28	0.4	Specially precipitated ATH designed for PVC cable compounds and ZHFR compounds	spherical particle size fully de-agglomerated powder for better mixing and improved compatibility of polymer compounds
FR 11500	White de-agglomerated powder	1.5 - 1.8	220 °C	28	0.4	Specially precipitated ATH designed for PVC cable compounds and ZHFR compounds	spherical particle size fully de-agglomerated powder for better mixing and improved compatibility of polymer compounds
SYNTHETIC ATH							
FR 9090	White Fine free-flowing Powder	1.4 - 1.7	210-220 °C	35	0.4	PVC, Rubber, ZHFR compound where importance of processing, mechanical properties and surface finish	Innovative technology gives good spherical particle shape results in better bonding with the polymer
FR 9250	White Fine free-flowing Powder	1.5 - 1.8	210-220 °C	37	0.4	Better FR & low smoke in PVC in comparison to other fine ATH	FR & FRLS PVC & other polymer compound
FR 9115	White Fine free-flowing Powder	1.6 - 1.9	210-220 °C	40	0.4	PVC, Rubber, ZHFR compound where importance of processing, mechanical properties and surface finish	FR & FRLS PVC & other polymer compound
GROUND ATH							
FR 4003	White Powder	2.8 - 3.5	210 °C	45	0.700-0.800	Fine ground ATH specially for high filled FR & FRLS PVC & RUBBER compounds	Higher decomposition temperature leads to non porous PVC compounds
FR 3004	White Powder	3 - 4	210-220 °C	45 - 48	0.700-0.800	Ground ATH specially for highly filled FR & FRLS PVC and other polymer applications	Non-porous ATH filled PVC compounds as decomposition temperature is high
FR 2005	White Powder	2.4	210-220 °C	50 - 55	0.700-0.800	Ground ATH specially for PVC applications. Where color of compound is very important	Fine particle with better Whiteness value upto 95

25 kgs net content in polycoated HDPE bag

**BOTH STEARIC/ SILANE COATED AND UNCOATED GRADES ARE AVAILABLE AS PER REQUIREMENT.

FIRE RETARDANT SYNERGIST

PRODUCT RANGE	APPEARANCE	PARTICLE SIZE D 50 (µm)	WHITENESS %	OIL ABSORPTION %	APPLICATION	BENEFITS
SAT-07	White Powder	1.5 - 3.0	96	41	Replaces antimony trioxide in all applications with the same flame retardant properties	SAT 07 can replace ATO with good properties. This product save the cost, but also less content of Pb, As, and Hg than ATO
AT -FR	White Powder	1.5 - 3.0	96	41	Replaces antimony trioxide in all applications with the same flame retardant properties	SAT 07 can replace ATO with good properties. This product save the cost, but also less content of Pb, As, and Hg than ATO

25 kgs net content in polycoated HDPE bag

SMOKE SUPPRESSANT

PRODUCT RANGE	APPEARANCE	SMOKE %	THERMAL STABILITY	APPLICATION	BENEFITS
FGLS 30301	Fine White Powder	46.2	250 °C	Smoke suppressant for Wire and cable compound, PVC leather and all soft/rigid application	Very fine particle size, which helps in better coverage of PVC compound & better smoke suppressant properties
FGLS 30400	Fine White Powder	41.8	250 °C	PVC and other polymer FRLS application	Reduce smoke density at very less addition rate
S-GARD 7	Fine White Powder	41.8	250 °C	PVC and other polymer FRLS application	Reduce smoke density at very less addition rate

25 kgs net content in polycoated HDPE bag

ZINC BORATE

PRODUCT RANGE	APPEARANCE	PARTICLE SIZE D 50 (µm)	WHITENESS %	THERMAL STABILITY	APPLICATION	BENEFITS
AZB 12040	Fine White Powder	≤ 5	98	340 °C	FR & Low smoke PVC wire and cable & other polymer application	smallest particle size and water crystallization upto 16%, Better FRLS compound performance
AZB 21400	Fine White Powder	≤ 5	98	340 °C	FR & Low smoke PVC wire and cable & other polymer application	smallest particle size and water crystallization upto 16%, Better FRLS compound performance

25 kgs net content in polycoated HDPE bag

MAGNESIUM HYDROXIDE

PRODUCT RANGE	APPEARANCE	PARTICLE SIZE D 50 (µm)	WHITENESS %	THERMAL STABILITY	OIL ABSORPTION %	APPLICATION	BENEFITS
SMG 10060	White Powder	10	90	350 °C	45	Synthetic magnesium hydroxide with excellent performance in PVC, Rubber, ZHFR & other cable compound	Better surface finish

25 kgs net content in polycoated HDPE bag

Certifications



SMERA RATINGS LIMITED

Our Duplast Product Portfolio



DuPlast®

AN ISO 9001:2015 COMPANY

www.duplast.in

CALCIUM ZINC STABILISERS

PVC PLASTICIZERS

CARBON BLACK

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