



DATA SHEET

BurnEx™ Plus A1590P

Dry Powder Colloidal Antimony Pentoxide Flame Retardant Additives

BurnEx™ Plus A1590P

Nyacol Nano Technologies, Inc. offers dry powder colloidal antimony pentoxide for use as a synergist with halogenated flame retardants in high performance epoxy.

ADVANTAGES OVER CONVENTIONAL ANTIMONY TRIOXIDE SYSTEMS

- Strong absorption properties to purify insulation and encapsulation polymers.
- Low chemical reactivity that will not interfere with electroless plating solutions.
- Free-flowing particles for exceptional consistency, better mixing and easy processing.
- Non-pigmenting for light transmission and mass tone colors.

SUMMARY

FORM: BurnEx A1590P is a powder made by spray-drying aqueous solutions of colloidal antimony pentoxide.

BurnEx A1590P has an acidic surface and free-flowing agglomerates approximately 10–30 microns in size.

FUNCTION: BurnEx A1590P is designed for flame retardant applications where a powder form of antimony pentoxide is preferred over the liquid form. Antimony oxide flame retardant synergists are always used with a source of halogen such as organic bromine and/or chlorine materials. Antimony pentoxide will absorb metallic impurities in epoxy used in electronic applications and improve long-term performance.

PRODUCTS

BurnEx A1590P is an acidic surface material, which will absorb metallic ions and improve the properties of insulation and encapsulation polymers by effectively tying up

these ionic impurities. It is sodium-free and contains approximately 10% trivalent antimony oxide and some water of hydration.

TYPICAL PROPERTIES

Antimony pentoxide (Sb ₂ O ₅), % by weight:	92
Form:	Yellow powder
Agglomerate size, micron:	10–40
Ultimate particle size, micron:	0.06
pH, 10% in water:	2.0

PACKAGING

15-gallon fiber drum / 56 liters	150 lb. net / 68 kg.
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FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

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