



DATA SHEET  
BurnEx® Plus A1588LP A1590

Dry Powder Colloidal Antimony Pentoxide Flame Retardant Additives

## BurnEx® Plus A1588LP, BurnEx® Plus A1590

Nyacol Nano Technologies, Inc. offers dry powder colloidal antimony pentoxide ( $Sb_2O_5$ ) 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 Plus A1588LP and BurnEx Plus A1590 are powders made by spray-drying aqueous solutions of colloidal antimony pentoxide.

BurnEx Plus A1588LP and BurnEx Plus A1590 have acidic surfaces and are free-flowing agglomerates approximately 10–30 microns in size.

**FUNCTION:** BurnEx Plus A1588LP and BurnEx Plus A1590 are 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 Plus A1588LP 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. BurnEx Plus A1588LP contains approximately 3–4% sodium and some water of hydration.

BurnEx Plus A1590 is a sodium-free version of A1588LP. BurnEx Plus A1590 contains approximately 10% trivalent antimony oxide and some water of hydration.

### TYPICAL PROPERTIES

	BurnEx Plus A1588LP	BurnEx Plus A1590
Antimony Pentoxide ( $Sb_2O_5$ ), % by weight:	83	92
Form:	White Powder	Yellow Powder
Agglomerate size, micron:	10–40	10–40
Ultimate particle size, micron:	0.03	0.06
pH, 10% in water:	2.5	2.0

### PACKAGING

	BurnEx Plus A1588LP	BurnEx Plus A1590
15-gallon fiber drum / 56 liters	150 lb. net / 68 kg.	150 lb. net / 68 kg.

### FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

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