Halogen/Antimony Pentoxide Concentrate

BurnEx® 2000–10

Nyacol Nano Technologies, Inc. offers concentrates for use as flame retardant in polyolefins.

ADVANTAGES OVER CONVENTIONAL ANTIMONY TRIOXIDE SYSTEMS

- Non-pigmenting for light transmission and deep mass tone colors.
- Physical properties are retained.
- Nano-sized particles are pre-dispersed.

FUNCTION

The BurnEx 2000 series of flame retardant concentrates was developed for the polyolefin market. This concentrate is made from nano-sized, fully dispersed antimony pentoxide and melt-blendable brominated flame retardant in polypropylene.

Processing with BurnEx 2000 yields superior physical characteristics. In some cases, the finished product maintains the physical properties equivalent to the virgin polymer.

Cast and blown films, fine denier yarns and monofilament lines, and other polypropylene materials needing flame retardancy are candidates for this concentrate. BurnEx 2000–10 is recommended for blow-molding or injection molding applications.

FORM

BurnEx 2000–10 is a degassed, pre-dispersed halogen/antimony pentoxide in 1/8" polypropylene pellets.

TEST RESULTS

The recommended FR starting loading is 2% active FR, an 8% loading of BurnEx 2000–10. In fibers the starting loading is 3% active FR.

Carrier: 4 MFI Polypropylene
Halogen/Antimony Mix: 3:1 mole ratio
FR Loading: 25%

On 1/8" test plaques: 3 to 1 letdown ratio, about 6% FR

Notched Izod, ft-lb/in: 0.63
Elongation at yield, %: 8.0–16.1
Tensile strength at yield, psi: 5128
Elongation at break, %: 29.4–49.6
Tensile strength at break, psi: 3513
UL–94 rating; Afterflame, sec.: V-2; 0–3.8
Translucency: Very Slightly Translucent – Translucent

FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER

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