



DATA SHEET  
BurnEx® 2000-10

## 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

Nyacol Nano Technologies, Inc. Telephone: 508-881-2220 Local Area  
Megunko Road 800-438-7657 U.S. Toll-Free  
P.O. Box 349 Fax: 508-881-1855 24-Hour  
Ashland, MA 01721-0349 U.S.A. Internet: www.nyacol.com

Information herein is accurate to the best of our knowledge. Suggestions are made without warranty or guarantee of results. Before using, user should determine the suitability of the product for its intended use and user assumes risk and liability in connection therewith. We do not suggest violation of any existing patents nor give permission to practice any patented invention without a license. 13/01