

Endura® PBT-101

Endura® Flame Retardant Masterbatch for PBT, PET and Copolyester Resins

Endura® PBT-101 is a flame retardant polyester masterbatch that can be letdown with PET or PBT resins to produce flame retardant PET or copolyester fibers and monofilament. Endura® PBT-101 is also recommended for use in injection molding applications. Endura® PBT-101 is a halogenated system with antimony oxide synergist.

Endura® PBT-101 is designed for use in fiber and textile applications that meet the flammability requirements of CPAI-84, NFPA-701, NFPA-702, and MVSS-302. Use levels of 25% or less are typical. Endura® PBT-101 offers good dispersion - a significant advantage in preventing plugging of spinnerettes, as well as fiber breakage during spinning or drawing. It is white in color, and can be pigmented easily to produce other colors, including black.

In injection molding applications, at recommended use levels, Endura® PBT-101 meets UL-94 V-0 and V-2 flammability requirements.

Typical Properties*

Property	Units	Test Method	Result
Specific Gravity	g/cm ³	ASTM-D-792	2.20
Bulk Density	lb/ft ³	ASTM-D-1895	74.0

Flammability Data in a Typical PBT Resin

Flammability Test	Loading(%)	Test Thickness(in)	Flammability Rating
NFPA 701	25	0.002-0.003	Passed
NFPA 702	25	0.002-0.003	Passed
UL-94	10	0.058	V-2
UL-94	15	0.058	V-0

Endura® Masterbatches Improve Your Final Product Quality.

Adequate mixing is essential to developing maximum performance from flame retardant additives. Since the flame retardant ingredients in Endura® Masterbatches are thoroughly wetted with plastic, they are much more easily dispersed than individual dry ingredients. As a result, the use of concentrates rather than dry powders can improve both the flame retardancy and physical properties of the end product, and in many cases may permit a lower loading.

Cleaner, More Efficient Production with Endura Masterbatches.

Plastics processors who use concentrates rather than dry powders benefit from a clean plant with minimal housekeeping. Employee dust exposure likewise is minimized. Materials handling is simplified with free-flowing, non-bridging concentrates that can be transferred easily with pneumatic conveyors.

Handling and Use

Endura flame retardant compounds and concentrates are considered to be non-hazardous under normal conditions. Material Safety Data Sheets are available on all these products, and you are encouraged to read and understand these documents before using the product. Since these products are used at elevated temperatures, fumes may be generated under some use conditions. Ventilation is necessary to minimize employee exposure to these fumes.

Packaging and Samples

Standard packaging for concentrates is in 1,000-lb boxes, lined and on pallets. Optional are 250-lb fiber drums and 50-lb bags. To meet particular needs, boxes up to 1,400 lb can be supplied. Samples are available on request by calling Polymer Products' toll-free order number: 1-800-836-8589.

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