

Polymer Products Company – America's masterbatch experts

Polymer Products Company specializes in the design and development of additive masterbatches – from flame retardancy to anti-static to custom formulations designed with your specific needs in mind.

Flame Retardant Masterbatches:

We are the leader in formulated flame retardant masterbatches.



When your polymer must be flame-retardant, Polymer Products Company has the masterbatch expertise to make it happen. Polymer Products Company is the largest supplier of flame retardant masterbatches in North America. We produce complete flame-retardant systems as well as Antimony Oxide masterbatches.

Specially formulated for ease-of-use in a wide range of polymer applications, our master batch technology ensures maximum performance – improving overall flame retardancy as well as the physical properties of your end product.

You can choose Endura® flame retardant masterbatches when you need quality, consistency and leading-edge performance from your flame retardant systems. In addition to a wide range of Endura flame retardant masterbatch applications, Polymer Products Company has the unmatched expertise to work with you to develop custom formulations that meet your unique requirements.

Antimony Oxide Masterbatches:

Our masterbatches make using antimony oxide easier and safer.



The use of masterbatches is the ideal way to incorporate antimony oxide into flame retardant formulations. At Polymer Products Company, we encapsulate antimony oxide within a polymer masterbatch, resulting in ease of handling, less dust, and minimized exposure.

While antimony oxide has some disadvantages related to potential health issues, it is an outstanding flame retardant synergist. Years of research by many groups directed towards finding alternate synergists have found nothing that is as effective and as robust as antimony oxide.

Antimony oxide is a fine white powder, produced from the oxidation of antimony metal. It is used as a synergist with halogenated, predominately brominated, organic molecules to impart flame retardant properties to polymers. Halogenated compounds are inherently flame retardant and by themselves are capable of flame retarding polymers.



The use of antimony oxide decreases the amount of halogenated compound required for flame retardant performance. During fire, antimony oxide reacts with the halogenated material in the condensed phase, forming oxyhalides of antimony and antimony trihalide. As these moieties enter the gas phase, they act to quench radicals responsible for the propagation of the combustion process.

Antimony is found in nature along with arsenic and lead. As such, antimony oxide contains trace amounts of the oxides of lead and arsenic. At Polymer Products Company, we use only high-purity grades of antimony oxide that are highly refined and certified to meet industry and regulatory standards related to these impurities.

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Anti-Static Masterbatches:

Our anti-static masterbatches are designed to protect against static discharge.



Polymer Products Company has developed a series of high-performance static dissipative masterbatches. Our Durastat® masterbatches are used to impart antistatic properties to film used in electronics packaging.

Durastat products impart electrical performance properties meeting Military Specification B 81705-C. These amine-free products are suitable for use with polyethylene and possess unusually long retention of the antistatic properties.

Durastat is available in three basic grades as well as part of a masterbatch that combines both antistatic and flame retardant properties. These masterbatches are available in natural as well as the standard colors used in the industry.

Specialty Masterbatches:

We can help you with custom formulations.



At Polymer Products Company, our passion is innovation. But our goal is to provide innovative solutions for our customers.

We offer an industry-leading combination of experience, expertise and flexibility that allows us to work with you to develop custom formulations that meet your exact requirements. We're flexible and we work hard to be responsive to your needs.

We know "standard" formulations may not always fit your specific requirements. Our experts are ready to help you develop a solution that does.



www.polymermasterbatches.com



At Polymer Products Company, we offer a wide range of branded and custom masterbatches to meet virtually every need in the industry.

Here are a few examples:

- Non-Halogenated Flame Retardant Thermoplastics
- Custom designed Flame Retardant Compounds
- Specialty Thermoplastic Compounds
- Multifunctional Additive Masterbatches

Polymer Products Company is built on a unique combination of cutting-edge innovation meeting exacting customer needs. When your polymer requires a combination of properties that simply isn't available, we'll develop it.

Why Use Masterbatches?

- **Improved Properties** – Good dispersion is the key to maximum performance. The ingredients in our masterbatches are pre-dispersed and thoroughly mixed with the carrier resin. This results in improved physical properties. In many cases, this results in lower loadings when compared to free powders.
- **Cleaner, Improved Material Handling** – Using masterbatches rather than dry powders means a cleaner plant with minimal housekeeping effort. Dust exposure is greatly reduced with masterbatches, as material handling is simplified with free-flowing, non-bridging materials that can be transferred easily with pneumatic conveyors.
- **More Efficient Production** – Masterbatches increase efficiency through higher production rates, less power consumption, higher yields and less abrasion and equipment wear.
- **Safer** – Using our masterbatches eliminates employee exposure hazards associated with some powders and liquids. Your employees can focus on your end product.

Please check us out at polymermasterbatches.com.

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