

Masterbatches for BOPE / MOPE films

A portfolio overview of our masterbatch solutions in North America



We make Masterbatch solutions for oriented films

Today LYB is making the future of packaging a reality. LYB provides a full line of masterbatch solutions that can be customized to meet your Biaxially-Oriented Polyethylene (BOPE) and Mono-Axially Oriented Polyethylene (MOPE) film structure needs. Our oriented product offerings include slip, antiblock, antistatic and antifog to address the most challenging packaging designs.

LYB has long been a leader in the BOPP masterbatch market and can help translate the demanding requirements of oriented polypropylene (PP) applications to polyethylene (PE). BOPE/MOPE film construction can help facilitate a mono-material structure, which can aid in the increase of recyclability for PE and multilayer packaging.

Our technology centers across the globe allow new products and applications to be developed in close collaboration with suppliers and customers, with a clear commitment to the oriented market and support of a circular economy.



Explore our broad range of Masterbatches

Additive Type	Product Name	Additive Description
Antiblock	<i>Polybatch AB</i>	The addition of antiblock into thin films prevents their tendency to stick together (block). A variety of Polybatch AB products are available depending on required film properties (antiblock performance, optical properties, surface roughness, and scratch resistance).
Antioxidant	<i>Polybatch AO</i>	Antioxidants can protect polymers during processing as well as throughout the package lifetime. Antioxidants also enable the use of recycled content in packaging by managing gel formation from polymer degradation.
Slip	<i>Polybatch CE</i>	The reduction of film to metal and film to film coefficient of friction (COF) enables higher processing and handling speeds. Polybatch CE masterbatches provide a variety of short-term and long-term COF reduction for packaging film.
White	<i>Polybatch White</i>	LYB offers a wide range of white masterbatch with up to 80% titanium dioxide. These masterbatches are appropriate for labels, lamination films, protective films, solid white films for printing, and many other applications.

Additive Type	Product Name	Additive Description
Antifog	<i>Polybatch</i> AF	Antifog concentrates additives migrate to the film's surface and spread out condensed water coming from the packaged goods to prevent droplet formation, keeping the package clear and its contents visible to the consumer.
Antistat	<i>Polybatch</i> VLA	Static build up can limit the processing speed of film lines, and can lead to dust pickup on the film. Internal antistatic additives are available to dissipate the static charges and prevent build up.
Matte	<i>Polybatch</i> DUL	Matte compounds are used to provide a more natural, luxury appearance to PE packaging. They are available in a variety of seal initiation temperatures based on application need.
Nucleator	<i>Polybatch</i> CLR	Semi-crystalline polymers crystallize from the melt upon cooling. Nucleating agents increase the rate and temperature of crystallization, which has processing advantages and improves the barrier, stiffness, and optical properties of the film.
Opaque / Pearlescent	<i>Polybatch</i> PF	Pearlescent films with non-pigmented white opacity can be produced with Polybatch PF cavitating masterbatches upon film orientation. This non-pigmented method of creating white films can increase a package's recyclability over pigmented film. Polybatch PF is also available as a combined cavitation and TiO ₂ masterbatch when needed.
Polymer Modifier	<i>Polybatch</i> CPS	Adding Polybatch CPS to oriented PE films can improve processability as well as physical properties such as haze, gloss, stiffness, and barrier properties. Polybatch CPS masterbatches do not have food contact approval in polyethylene and are not intended for food contact applications.
Process Aid	<i>Polybatch</i> AMF	The incorporation of process-aid masterbatches during processing reduces the friction between the molten polymer and the metal die wall, eliminating melt fracture and allowing for higher output from the decrease in die pressure. Die buildup is also reduced or eliminated with the use of process aids, allowing for less downtime to clean die lips.
Super Slip	<i>Polybatch</i> IL	Polybatch IL products contain non-migratory super slip additives that offer instant COF reduction and excellent hot slip properties. These super slips are also used for cold-seal release applications to prevent films from sticking to themselves during winding.

About us

We are LyondellBasell (“LYB”) – a leader in the global chemical industry creating solutions for everyday sustainable living. Through advanced technology and focused investments, we are enabling a circular and low carbon economy. Across all we do, we aim to unlock value for our customers, investors and society. As one of the world’s largest producers of polymers and a leader in polyolefin technologies, we develop, manufacture and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. For more information, please visit www.lyb.com or follow [@LyondellBasell](https://www.linkedin.com/company/lyondellbasell) on LinkedIn.

WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT. LYB prohibits or restricts the use of its products in certain applications. For further information on restrictions or prohibitions of use, please contact a LYB representative. Users should review the applicable Safety Data Sheet before handling the product.

Polybatch is a trademark owned or used by one of the LYB family of companies and is registered in the U.S. Patent and Trademark Office.