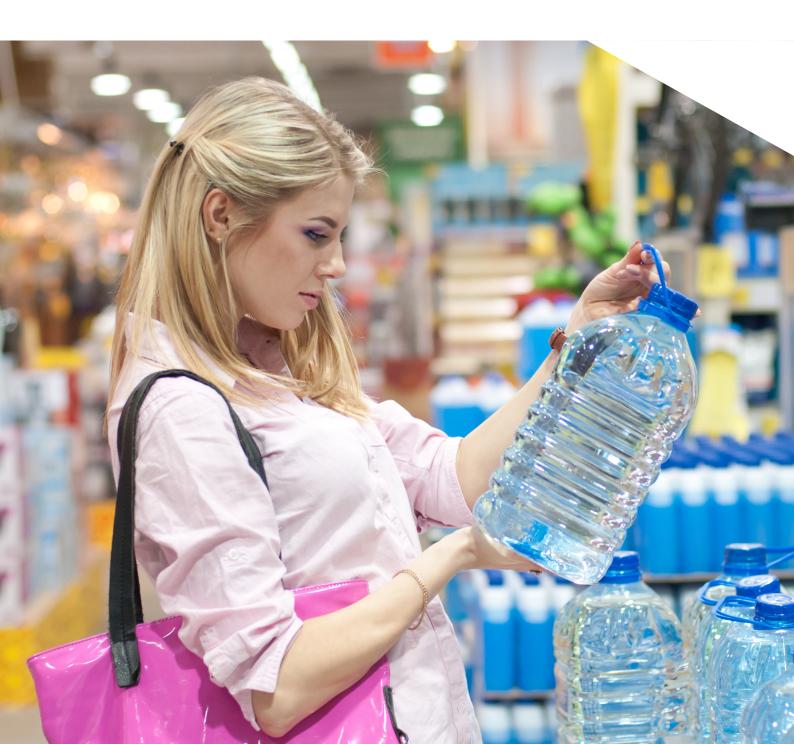


# Masterbatches for caps & closures





# Masterbatches for caps & closures

It is important to LyondellBasell to be close to its customers' needs. For over 60 years, we have been working closely with our masterbatch clients and brand owners to help create packaging solutions that fit their needs.

Our extensive know-how in R&D, market expertise and color-matching capabilities, provided by our dedicated teams, make us a strong partner, ensuring a global reach with a local focus. Our complete product range of solutions for packaging, as well as the complementary services that we offer to our customers, enable us to be your true one-stop shop provider for customized solutions and innovative materials.

In addition to our masterbatch product offering, we can provide high performance compounds, resins and services.

# Our masterbatch advanced solutions

LyondellBasell is committed to creating solutions for everyday sustainable living. We are using recycled and bio-based materials as feedstock and creating products that address market demand for sustainable solutions. Next to our traditional portfolio for the caps and closures market (see table on page 2), we are offering a complementary range of advanced solutions:

- **Design for Circularity:** Masterbatch solutions that support intelligent product design including NIR-detectable masterbatches for optimized polymer sorting in recycling facilities.
- CirculenRecover: Masterbatch and Color Concentrates that use mechanically recycled content as the carrier resin. We aim to help our customers reach their recycled content goals with our offering.
- CirculenRenew: Masterbatch and Color Concentrates based on renewable resources\* offering the same properties as their virgin counterparts and ideal drop-in solutions for packaging of food, beverages, personal care or cosmetics.
- *CirculenRevive*: Using advanced (molecular) recycling technology. These products enable our customers to produce new materials for applications that must meet strict regulatory requirements such as food or beverage packaging.

<sup>\*</sup>Using a mass balance approach



# Why LyondellBasell?

- Global production network with 20 masterbatch manufacturing sites
- · Consistent quality and supply, worldwide
- Certified quality standards (i.e. ISCC Plus, ISO 9001).
   Dedicated global team to support regulatory requirements
- · Food contact materials are manufactured under GMPs
- · Customer specific innovation
- · Tailor made solutions for customers
- Broad portfolio: One stop shop for masterbatches
- Circular solutions and intelligent product design to reach sustainability goals

#### **Main applications:**

- Food
- · Beverage
- Cosmetics
- · Personal care
- Industry

#### **Product benefits:**

- · Cost optimization
- Mechanical and chemical resistance
- Organoleptics
- · Product protection
- Visual attractiveness
- Option to source from recycled or bio-based material

## Discover our extensive product offering for caps and closures:

Product Group	Solution / Function
Polybatch Color	Customized Color masterbatch, special effects ( ie. metallic, glitter ), NIR detectable colors
Polywhite	TiO <sub>2</sub> masterbatch
Polyblak	Carbon black masterbatch
Polybatch Additives	Additive masterbatch: torque resistance, UV additives, ${\rm O}_2$ scavengers, nucleating agents, antistatic, laser marking, odor absorbers, blowing agents, other processing additives
Polybatch Combination Masterbatches	Combining functional additives and color masterbatches in one single product

Above mentioned product range can be sourced from recycled or biobased material under the Circulen brand

### 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 <a href="https://www.lyb.com">www.lyb.com</a> or follow @LyondellBasell on LinkedIn.

Before using a LyondellBasell product, customers and other users should make their own independent determination that the product is suitable for the intended use. They should also ensure that they can use the LyondellBasell product safely and legally. This document does not constitute a warranty, express or implied, including a warranty of merchantability or fitness for a particular purpose. In addition, no immunity under LyondellBasell's or third parties' intellectual property rights shall be implied from this document. No one is authorized to make any warranties, issue any immunities or assume any liabilities on behalf of LyondellBasell except in a writing signed by an authorized LyondellBasell employee. Unless otherwise agreed in writing, the exclusive remedy for all claims is replacement of the product or refund of the purchase price at LyondellBasell's option, and in no event shall LyondellBasell be liable for special, consequential, incidental, punitive or exemplary damages.

Circulen, Polybatch, Polyblak and Polywhite are trademarks owned and/or used by the LyondellBasell family of companies.

