

Mechanical recycling: *CirculenRecover*

High-performance circular solutions for a wide variety of applications



CirculenRecover polymer solutions are designed to help reduce virgin plastic use while maintaining the strength and consistency your applications demand. Derived from mechanically recycled plastic, our *CirculenRecover* products offer solutions that balance performance and sustainability for applications ranging from luggage and automotive trim to select food packaging end uses.

CirculenRecover products are designed to reliably perform in many demanding manufacturing processes. Backed by our global asset base, decades-long history of innovation excellence, and best-in-class safety and quality control, *CirculenRecover* mechanically recycled polymer solutions are just one way we make circular and low carbon solutions work for your business.



Product benefits

- Can be blended or compounded with traditional fossil-based products
- Grades designed for injection molding, blow molding, flexibles and more
- Helps meet customer demands for PCR content

Typical applications



Bottles, caps and closures



Durable consumer goods



Automotive interiors, exteriors and parts



Food packaging*

Unlock the value of CirculenRecover

At LYB, we work across the value chain – from collection to offtake to production – to deliver high-performing circular and low carbon solutions for your business. Whether you're looking to reduce virgin resin use or increase the share of Post-Consumer Recycled (PCR) content, *CirculenRecover* polymers can help advance your long-term, future-focused strategy.

- **Communicating value:** Our circular feedstock sourcing strategies help customers confidently demonstrate sustainability value to end users and regulators.
- **Ready for emerging regulations:** As regulations such as Extended Producer Responsibility (EPR) and PCR mandates continue to evolve, stay ahead by working with us to ensure consistent access to high-performance materials with traceable PCR content and a verified chain of custody.
- **Custom colors, tailored performance:** With our Advanced Polymer Systems Masterbatch expertise, *CirculenRecover* materials can be compounded and tinted to deliver durable, attractive and high-performing solutions across a wide range of applications.
- **Flexible and production ready:** The *CirculenRecover* portfolio delivers dependable performance across processes including blown film, blow molding and injection molding. Options are also available for select food-contact applications.*

Two pathways for advancing sustainable solutions

CirculenRecover polymers offer two pathways to make mechanical recycling work for your business:

- **Our single-pellet solutions** combine innovative recycling technology with decades of expertise in resin formulation and compounding. By pairing the performance of our leading virgin grades with up to 90% PCR, *CirculenRecover* single-pellet solutions can help overcome common challenges when using PCR in demanding processes.
- **The 100% PCR polypropylene (PP) solutions** produced at our Jurupa Valley, California facility are designed to provide maximum PCR content, delivering high-quality solutions suitable for use in consumer goods and other targeted applications.

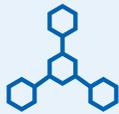


Our Jurupa Valley site manufactures resins made with post-consumer recycled content using mechanical recycling technology, with feedstock sourced primarily from municipal plastic waste recycling programs. These solutions are marketed under our *CirculenRecover* brand.

Our *Circulen* portfolio offers flexible pathways to achieve your sustainability goals

CirculenRecover polymers are just one way we help customers achieve their sustainability goals. Our broader *Circulen* portfolio uses innovative technologies to deliver sustainable solutions that can help reduce virgin plastic use and support lower Scope 3 emissions depending on your needs. Whether through mechanical recycling (*CirculenRecover* polymers), chemical recycling (*CirculenRevive* polymers) or, bio-circular feedstocks (*CirculenRenew* polymers), we help make circular and low carbon solutions work for your business.





A high-performance portfolio you can rely on

Our comprehensive portfolio delivers drop-in solutions to help you meet the latest regulatory standards and advance your sustainability goals.



Technical and commercial expertise

Using the latest innovations, our worldwide team of passionate problem solvers works to find solutions that meet your needs, helping you secure the necessary buy-in from stakeholders.



A fully integrated global ecosystem

With a network of external partners and collaborators offering complementary capabilities, our fully integrated global ecosystem is built for scale and consistency, bringing together the necessary skill sets and flexibility to deliver solutions for your business today and in the future.

Learn more about our *Circulen* portfolio of circular and low carbon solutions at lyb.com/circulen.

Let us help you find the right solution

With over 80 years of innovation expertise and a team of world class problem solvers, we are ready to help you find the solution to advance your sustainability goals. Connect with us online and learn more about our full portfolio of circular and low carbon solutions at lyb.com/circulen.

CirculenRecover product grades for North America

Product	Type	Process	Application * Food Contact	% PCR	PE MI (190 °C/2.16 kg) or PP MFR (230 °C/2.16 kg)	PE Density (g/cc) or PP Flex Modulus (kpsi) / Notched Izod (ft-lb/in)
L5670R	HDPE	Blown film/ blown molding	Food*	90	0.7	0.956
LM6007R	HDPE	Blow molding	Liquid food*	25	0.7	0.960
LR7320R	HDPE	Blow molding	Small part bottle*	75	35 (HLMI – 190 °C/21.6 kg)	0.959
EP445PR	PP	Injection molding	Tubs and containers* Caps and closures*	30	17	165/2.0
12RPL100	PP	Injection molding	General non-food contact purpose	100	12	190/0.9

*Certain grades may be suitable for food contact applications following review by LyondellBasell product stewardship and the customer.

To learn more about *CirculenRecover* grades available in Europe, please access our [Product Selection Guide](#).

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.

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