



# CirculenRecover EP643NR, EP643RR, and EP445PR

Ideal for injection molded caps, closures, and rigid containers



CirculenRecover EP643NR, EP643RR and EP445PR are single pellet, polypropylene-based resins containing at least 25% Post Consumer Recycled (PCR) content. Natural in color and food contact compliant, these resins are selected by customers for a wide variety of end uses, including food applications that require impact resistance while maintaining stiffness.

EP445PR can even maintain impact properties in cold temperature environments. Primarily used in injection molding processes that require medium melt flow rates, the natural single pellet color also enables you to more easily color match your parts so you can deliver consistent quality to your brand customers.

In the face of growing consumer demand for sustainable packaging, brand owners can rely on LyondellBasell to provide solutions. From preferred sourcing to pilot plant capabilities, to a portfolio featuring mechanically recycled, advanced recycled, and bio-circular renewable sources, LyondellBasell has the expertise and product solutions to help you achieve your sustainability goals.

## Physical properties

| Property                      | Units     | EP643NR | EP643RR | EP445PR  |
|-------------------------------|-----------|---------|---------|----------|
| Melt Flow Rate (230°C/2.16kg) | g/10min   | 12      | 23      | 17       |
| Flex Modulus                  | kpsi      | 220     | 210     | 165      |
| Notched Izod @73F             | ft-lbs/in | 1.1     | 1.1     | No break |
| Notched Izod @32F             | ft-lbs/in | --      | --      | 1.3      |
| PCR Content                   | %         | 25%     | 25%     | 30%      |

## Product Benefits

- Single pellet, natural resin color
- Contains at least 25% post-consumer, mechanically recycled material
- Food contact compliant
- Good balance of impact resistance while maintaining stiffness

## Converter Processing

- No blending required
- Multiple melt flow rate options to fit your part molding operation

## Targeted Processes

- Injection Molding

## End-Use Products and Markets

- Caps & closures, including beverages
- Rigid containers, such as deli tubs and other food containers
- Small part houseware

# 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](http://www.lyb.com) or follow [@LyondellBasell](https://www.linkedin.com/company/lyondellbasell) on LinkedIn.

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