BOROUGE INTERNATIONAL

Product News

# BorPure™ RD508MF

## New polypropylene grade enabling monomaterial, high-barrier films with advanced surface performance

# BorPure™ RD508MF – enabling recyclable food packaging without increasing cost or production complexity

## BorPure™ RD508MF

BorPure™ RD508MF is a polypropylene (PP) grade designed for BOPP, cast and blown film extrusion, suitable for food contact applications. It is particularly well suited for sensitive products where taste and odor must be preserved, as well as applications requiring extended shelf life.

Based on Borstar® Nextension Technology, it offers a combination of high purity, thermal resistance, and mechanical strength. It also provides a very clean surface, supporting efficient conversion during printing and metallization, and enabling strong adhesion to barrier coatings.

By enabling cost-effective high-barrier monomaterial structures, BorPure™ RD508MF makes it possible to design easy-to-recycle packaging without compromising performance or processing efficiency.

## Special features

- Very high adhesion to barrier coatings, metallization, and printing inks
- Good thermal stability and effective interaction with sealing modifiers
- Improves the mechanical strength of BOPP films
- Reliable processing on high-speed BOPP lines

## Key applications

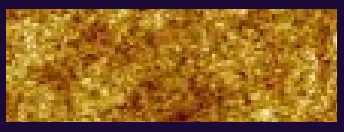
BorPure™ RD508MF is ideal for BOPP, cast and blown film applications, including:

- Snack packaging
- Retortable food packaging
- Barrier lidding film

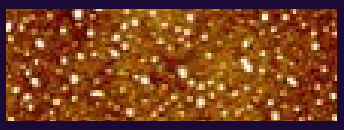
## A cleaner surface for more efficient conversion

Surface analysis shows that Borpure™ RD508MF has a significantly cleaner surface than conventional heat-sealable PP, supporting more reliable printing, coating and metallization.

**BorPure™ RD508MF**



**Conv. Heatseal PP**



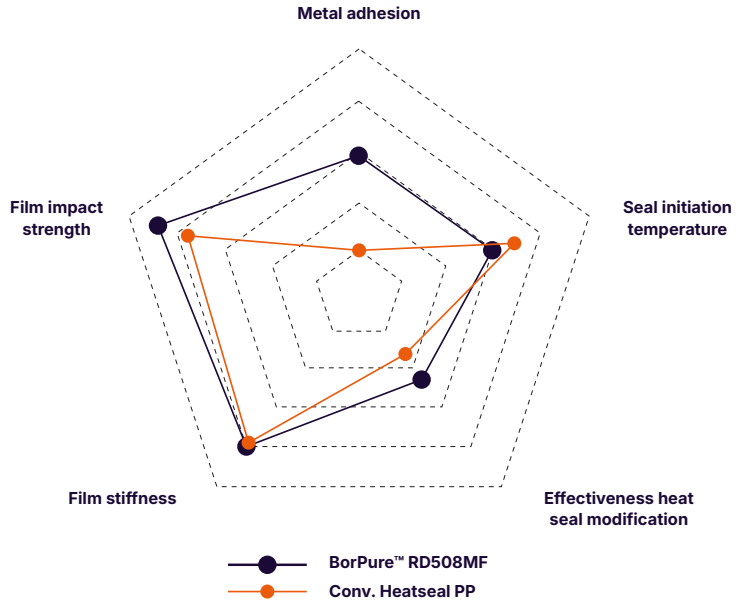
AFM surface comparison of BorPure™ RD508MF and conventional heat-sealable PP. © Borouge International

## Advancing circularity with BorPure™ RD508MF

Monomaterial packaging offers clear recyclability advantages, but is often less efficient and more costly than multi-material structures. BorPure™ RD508MF addresses this by enabling high-barrier monomaterial films that combine performance, processing efficiency, and cost effectiveness.

- **Reduced material use:** Good mechanical strength enables downgauging, reducing overall material consumption.
- **Lower food waste:** High barrier performance extends shelf life and reduces spoilage.
- **Fewer additives:** Effective sealing performance reduces the need for sealing modifiers, and supports simpler, harmonized formulations.
- **Efficient processing and conversion:** Supports reliable processing at high line speeds and high-quality printing and laminate bonding.

## BorPure™ RD508MF properties




Comparative performance of BorPure™ RD508MF versus conventional heat seal PP across key film properties, including adhesion, sealing behavior and mechanical performance. © Borouge International



| Properties | Unit | Test Method | BorPure™ RD508MF |
|---|---|---|---|
| MFR (190 °C / 2.16 kg) | g/10 min | ISO 1133-1 | 6 |
| Flexural Modulus | MPa | ISO 178 | 1000 |
| Melt temperature | °C | ISO 75-2 | 135 |

## Borstar® Nextension Technology

**Breakthrough technology providing tailor-made and circular solutions with outstanding performance**

With the development and launch of Borstar® Nextension technology, Borouge International solidifies its position as an industry leader in innovation and technology. Thanks to the proven performance of Borstar® and unique single-site Borstar® Nextension catalyst, Borstar® Nextension technology enhances the range of polypropylene (PP) and polyethylene (PE) properties and drives plastics circularity.



**About Borouge International**

Borouge Group International AG (Borouge International) is a global leader in polyolefins formed in 2026 through the combination of Borouge Plc, Borealis and NOVA Chemicals. Backed by long-term shareholders XRG, the international investment arm of ADNOC, and OMV, Borouge International brings together world-class assets, advantaged feedstock access and proprietary technology to deliver reliable high-performance polyolefin solutions across consumer products, infrastructure, energy, mobility and advanced products.

Borouge International combines a differentiated asset base, global reach and deep technical expertise to serve customers across key growth markets. The company is headquartered in Austria, with a regional headquarters in Abu Dhabi and corporate hubs in North America and Asia Pacific.

Learn more about the company: **borougeinternational.com.**

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