

PRODUCT NEWS

# BorPure™ RE539MF

Setting new standards in polypropylene  
(PP) packaging



BOREALIS

بروج  
Borouge



# BorPure™ RE539MF random PP offers excellent sealing for food packaging films

Belonging to Borealis' new family of ground-breaking PP grades, BorPure RE539MF is designed for eco-efficient, recyclable PP food packaging. As a next generation random PP, it is ideal for use as a sealing material in cast films due its exceptional purity.

The resin is made using proprietary Borstar® Nextension Technology, which brings a step-change in performance for tailor-made PP. The technology fulfils value-chain demand for highly efficient and safe packaging solutions that provide excellent sealing and best-in-class purity.



## Outstanding packaging efficiency and product safety

Tests have confirmed the exceptional purity of BorPure RE539MF compared to standard products, and therefore its suitability for use in highly sensitive, flexible food packaging applications. It provides packers with superior sealing performance, allowing a broad sealing window and highly efficient tight seals on packaging lines. PP cast film converters benefit from excellent film clarity at high extrusion throughput, very low overall migration, low seal initiation temperature (S.I.T.), and high seal strength.

Physical properties		Borealis RE239CF	BorPure™ RE539MF
MFR (230/2, 16)	g/10 min	11	11
Melting temp	°C	140	128
Overall migration	mg/dm3	9.9	3.8
Flex modulus	MPa	650	1000

Flim properties – 50µm		Borealis RE239CF	BorPure™ RE539MF
SIT	°C	117	112
Haze	%	1.6	1.6
Slow puncture	N	46	57
Tensile modulus	MPa	430	540

## Key benefits of BorPure™ RE539MF

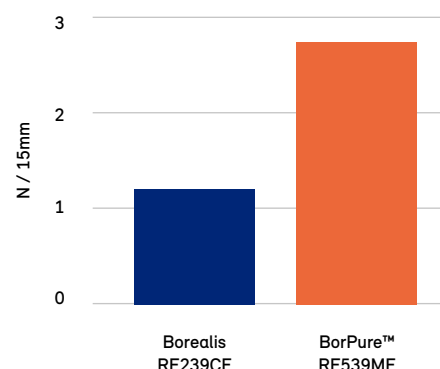
- High purity – very low migration / volatiles (~60%)

- Lower SIT (~5°C)

- Higher seal strength (x2)

- Increased stiffness

## Seal strength





Powered by Borstar®

**Nextension  
Technology**

# Borstar® Nextension Technology

The Borstar® Nextension Technology is a breakthrough innovation achieving a step change for polypropylene (PP) performance. It yields synergistic effects resulting from the combination of proven Borstar performance based on multimodality and the controlled incorporation of the comonomer and the novel, single-site Borstar Nextension catalysts.

The technology broadens the range of PP properties thanks to its ability to tailor polymers for:

- **Packaging and Healthcare applications** with unrivalled higher purity, excellent transparency and optics after sterilisation, as well as superior sealing and bonding at lower temperatures.
- **Fibre applications** with nonwovens weight reduction / downgauging, improved tensile and increased softness.
- **Mobility applications** with purity levels beyond today's automotive industry requirements with reduced odour and volatiles in automotive interior and exterior applications.

In addition, the groundbreaking proprietary technology drives plastics circularity by simplifying **Design for Recycling (DfR)**. It sets new standards by enabling material substitution in multilayer, multimaterial-based applications in a range of industries.

For customers, the Borstar Nextension Technology opens exciting new horizons for PP by uniting outstanding performance characteristics with enhanced circularity.



## Borealis and Borouge packaging solutions are making everyday life easier

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Borealis is one of the world's leading providers of advanced and sustainable polyolefin solutions and a European front-runner in polyolefins recycling. In Europe, we are a market leader in base chemicals and fertilizers. We leverage our polymer expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries such as consumer products, energy, healthcare, infrastructure and mobility. In re-inventing essentials for sustainable living, we build on our commitment to safety, our people, innovation and technology, and performance excellence. We are accelerating the transformation to a circular economy of polyolefins and expanding our geographical footprint to better serve our customers around the globe.

With head offices in Vienna, Austria, we employ 6,900 employees and operate in over 120 countries. In 2021, we generated total sales of EUR 12.3 billion and a net profit of EUR 1,396 million. OMV, the Austria-based international oil and gas company, owns 75% of our shares, while the remaining 25% is owned by Abu Dhabi National Oil Company, or ADNOC, based in the United Arab Emirates (UAE). We supply services and products to customers around the globe through Borealis and two important joint ventures: Borouge (with ADNOC, headquartered in the UAE); and Baystar™ (with TotalEnergies, based in the US).

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