

Media Release

Vienna, Austria | 19 October 2022

Groundbreaking Borstar® Nextension Technology sets new standards in performance-based polyolefins

- **New era of polypropylene film grades has begun with launch of first BorPure™ grades for flexible and thermoformed food packaging based on Borstar® Nextension Technology**
- **Nonwoven grade based on Borstar Nextension Technology offers excellent spinning performance and tensile strength**
- **EverMinds™ in action: increasing the impact of circular solutions thanks to superior performance in tandem with improved recyclability and material efficiency**

Borealis announces the launch of the first breakthrough polypropylene (PP) grades based on the groundbreaking Borstar® Nextension Technology, a step change in performance for tailor-made PP that delivers superior properties for cast and blown film. Two BorPure™ film grades that set new standards for PP food packaging, BorPure™ RB787MF and BorPure™ RE539MF, are designed for eco-efficiency and recyclability. The nonwoven grade Borealis HG485FB, also based on Borstar Nextension Technology, offers superior performance characteristics. These and all other Borstar Nextension grades can be made using feedstock from the Bornewables™ and Borcycle™ C portfolios of circular polyolefins. By leveraging its polymers technology expertise, Borealis is offering its partners and customers an ever larger number of solutions providing superior performance paired with enhanced circularity and material efficiency.

Borstar Nextension Technology: a breakthrough for PP applications

Based on the proprietary Borstar® platform, this groundbreaking technology broadens the range of PP properties by using proprietary, single-site Borstar Nextension catalysts and Borstar PP technology combined with multimodality and comonomer incorporation. Depending on application requirements, this step change in performance enables PP products to be tailored for superior optics and surface functionality, high purity, and sealing and bonding. The result is a spectrum of differentiated solutions that can be used in a variety of industries, including consumer products, healthcare, automotive, flexible packaging, and more.

“The Borstar Nextension Technology is a breakthrough innovation that will enable the development of novel and more circular solutions for a wide range of applications, especially in the packaging industry,” says Erik Van Praet, Borealis Vice President Innovation & Technology. “Built on the strong foundation of the Borstar platform and delivered through our profound technology expertise, this innovative blending of functionality and sustainability is in line with our [EverMinds™](#) ambition of accelerating action on circularity.”

Borstar Nextension Technology enhances performance, facilitates recyclability and eco-efficiency via downgauging

BorPure RB787MF and BorPure RE539MF are the first resins to be made using Borstar Nextension Technology, which is now being scaled up. They have been designed for use in flexible packaging applications such as highly transparent thermoformable films, and sheets and lamination films for pouches and lid films. PP blown film converters benefit from BorPure RB787MF's excellent and consistent film clarity at high extrusion throughput, very low overall migration, low seal initiation temperature, and high seal strength. PP cast film converters using BorPure RE539MF benefit from its superior transparency, high stiffness balance along with thermal stability, very low overall migration, and clean surfaces. Additional advantages include high packaging line efficiency, excellent packaging integrity, and outstanding organoleptics. The grades have been designed to enable an easier switch from conventional non-recyclable structures to fully recyclable monomaterial PP solutions, thus driving plastics circularity.

Also based on Borstar Nextension Technology is Borealis HG485FB, designed for the spunbond process. Thanks to its broad processing window and excellent spinning performance, converters can push the operating window in optimisation of web properties, web coverage, and strength. Compared to conventional resins, Borealis HG485FB provides substantial downgauging potential, thus enabling the more efficient use of resources while maintaining the same high functionality.

All grades based on the Borstar Nextension Technology may also be made using circular solutions from the Bornewables and Borcycle C portfolios. The [Bornewables™](#) portfolio consists of polyolefins made with renewable feedstock derived entirely from waste and residue streams such as used cooking and vegetable oil. The virgin-quality grades found in the [Borcycle™ C](#) family of chemically recycled solutions are fit for the most demanding applications, including food-contact and healthcare.

Bornewables and Borcycle C grades are ISCC PLUS certified according to the mass balance method that allows the customer to track and quantify the effective renewable (Bornewables) or circular (Borcycle C) feedstock used at each manufacturing step. Selecting grades from these portfolios allows customers to replace fossil fuel-based feedstock with an identical volume of sustainably sourced renewable or circular feedstock – without extra switching costs, and while maintaining the same high application quality.

“The launch of the first series of grades based on Borstar Nextension Technology enables customers and brand owners to adopt highly efficient and easily recyclable packaging solutions, all while setting new standards in PP performance,” says Peter Voortmans, Borealis Global Commercial Director Consumer Products. “And it's just the beginning, as we add more innovative grades to this unique family for use across other industries. This is yet another example of how Borealis is re-inventing essentials for sustainable living.”

For more information on Borstar Nextension [click here](#).

K 2022 will take place from 19 to 26 October 2022 in Düsseldorf, Germany.

We invite you to “Innovate Collaborate Accelerate” together with us by visiting Borealis and Borouge in Hall 6 at Stand A43, where new BorPure™ packaging solutions will be on display.



A new era of polypropylene film grades has begun with the launch of first BorPure™ grades for flexible and thermoformed food packaging based on Borstar® Nextension Technology.
Photo: © Borealis



The Borstar Nextension Technology is a breakthrough for PP applications. The result is a spectrum of differentiated solutions that can be used in a variety of industries, including consumer products, healthcare, automotive, flexible packaging, and more.
Photo: © Borealis

END

Media contact:

Virginia Wieser
Senior Manager, Corporate Communications,
Brand & Reputation

T +43 1 22 400 772 (Vienna, Austria)
media@borealisgroup.com

About Borealis

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 12.342 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 a holding company of the Abu-Dhabi based Mubadala. We supply services and products to customers around the globe through Borealis and two important joint ventures: Borouge (with the Abu Dhabi National Oil Company, or ADNOC, based in UAE); and Baystar™ (with TotalEnergies, based in the US). www.borealisgroup.com | www.borealiseverminds.com

About Borealis Consumer Products: Making everyday life easier

With over 50 years' experience in the industry, Borealis is an innovative and reliable supplier of superior polyolefin plastic materials used in consumer products, advanced packaging and fibre.

Superior and proprietary Borealis product brand and technologies like Anteo™, a new family of linear low density polyethylene (LLDPE) packaging grades based on Borealis Borstar® Bimodal Terpolymer Technology, make advanced applications possible in flexible packaging (including lamination film, shrink and protection film, stand-up pouches, food packaging). Borealis also offers high-performing solutions for rigid packaging (caps and closures, bottles, thin wall and transport packaging); and non-woven and technical fibres (filtration systems, hygiene products, technical textiles).

These value-added packaging and fibre innovations play a role in safeguarding the quality and safety of consumer and industrial products, but also fulfil demand for enhanced functionality and convenience. Plastic food packaging, for example, helps protect and preserve food from farm to fork. Spoilage is avoided thanks to efficient filling systems and leak-resistant packaging. Food stays fresher longer, and less must be thrown away. What is more, the consumer has a wider range of choices when it comes to convenient and appealing packaging formats.

Also white goods (from washing machines to refrigerators and air conditioning units) and small appliances (from toasters to power tools) are made more robust yet lighter, more energy efficient yet visually appealing, thanks to Borealis' advanced polypropylene solutions.

www.borealisgroup.com/polyolefins/consumer-products

About Borouge

Borouge, listed on the Abu Dhabi Securities Exchange (ADX symbol "BOROUGE" / ISIN "AEE01072B225"), is a leading petrochemical company that provides innovative and differentiated polyolefin solutions for the energy, infrastructure, mobility, advanced packaging, healthcare and agriculture industries. ADNOC owns a majority 54% stake and Borealis holds a 36% stake in Borouge. To find out more, visit: [borouge.com](https://www.borouge.com)

Anteo, Bornewables, Borcycle, EverMinds, BorPure are trademarks of Borealis AG.
Borstar is a registered trademark of Borealis AG