

Media Release

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## **Borealis and Borouge launch Fibremod™ family together with Borealis' announcement of the start-up of a new compounding plant line in Monza, Italy**

**Borealis and Borouge**, leading providers of chemical and innovative plastics solutions, announce the launch of Fibremod™ - their new product family of fibre-based compound polypropylene (PP) innovations for the automotive and the appliance industry. Connected to the launch of Fibremod, Borealis announces the start up of a new long glass fibre line in Monza, Italy.

### **Fibremod product family introduction**

The Fibremod family of engineered short (SGF) and long glass fibre (LGF) compounds consolidates the Xmod™ and Nepol™ glass fibre brands under one common name. This portfolio evolution is done to streamline the product brand portfolio and to build the stage for the innovation pipeline of all future, fibre-based materials. The name "Fibremod" represents both the material category and the ability of Borealis and Borouge to transform or modify a specific grade to fit and exceed the needs and requirements of its customers. Fibremod will be the future product brand for all fibre-based, PP compound solutions for automotive applications as well as for white goods and small appliances. The former product brand names Xmod and Nepol will be discontinued with the launch of Fibremod.

Fibremod innovations are supporting the automotive and appliance value chain in achieving its weight-saving and process cost-saving targets. The customised glass fibre reinforced PP solutions are at the cutting-edge of innovation, bringing lightweight, extra strength and impact performance to a wide range of applications. They also support more environmentally-considerate production by reducing processing temperatures and energy requirements when replacing alternative solutions such as polyamide (PA).

Borealis' proprietary Borstar® process technology enables Borealis and Borouge to tailor the highly engineered PP compounds to required stiffness

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aspects in order to meet the stringent needs of individual customer projects. For example, a unique, high performance glass fibre Fibremod solution was behind Volkswagen's (VW) decision to become the first original equipment manufacturer (OEM) to switch from glass reinforced polyamide (PA) to SGF PP from Borealis for its air intake manifolds (1,4/63kW and 1,6l/77kW engines). The use of Fibremod created a 15% weight reduction, superior acoustic performance and greater production cost efficiency for VW and its Tier One supplier. Today, Fibremod compound solutions are used in an increasing variety of end uses, such as for instrument panel carriers, front-end modules as well as different under the bonnet and appliance applications.

### **Start up of LGF line in Monza**

PP-LGF is a group of long glass fibre reinforced products which are produced in the new Monza plant by pultrusion to achieve increased fibre length in both pellets and final parts. The glass fibres are typically arranged parallel in the pellets having all the same length as the pellet itself. The Monza production facility is the specialty plant for Borealis, where smaller lines allow for more flexibility and Nimblicity™. The new PP-LGF production line in Monza is the ideal addition to the Monza plant strategy to serve customers with more specialized products.

Borealis has 20 years experience in developing and producing this type of polypropylene material and has developed its own proprietary processing technology for production. This technology leads to high quality products in terms of fibre impregnation and the wide possibility of fibre and matrix combinations for tailor-made solutions. The product portfolio covers glass fibre contents from 20% to 60%, with grades customised to provide for the highest stiffness and strength at elevated temperatures, with outstanding energy absorption in high speed deformation. Typically PP-LGF grades have excellent flowability for smooth processing and uniform shrinkage behaviour.

"With the unveiling of Fibremod, Borealis and Borouge have created a strong product brand portfolio partner for our Daplen™ range of mineral based material innovations for the automotive industry," comments Jost Eric Laumeier, Global Marketing Manager Engineering Applications, Borealis. "We are driving tomorrow's automotive requirements with our dedicated and highly engineered brand portfolio, highly experienced team as well as our global investments."

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“With the launch of Fibremod, we are also happy to announce the start-up of our LGF line in Monza, Italy,” says Harald Hammer, Vice President Engineering Applications. “This start-up will deliver a significant number of kilotonnes per year further underscoring our aim to deliver product and technology innovations for the automotive and the appliance industry.”



Fibremod™ innovations are supporting the automotive and appliance value chains in achieving their targets on reducing weight, saving process costs and considering the environment. Photo: © Borealis

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**About Borealis Engineering Applications**

For over 50 years, Borealis has been a leading supplier of advanced polyolefin plastics for engineering applications in the automotive industry and for household appliances. Thanks to its unique and proprietary Borstar® technology, Borealis provides a large portfolio of innovative products and services which create real value for customers and partners around the world. Innovative automotive solutions include materials for exterior, interior and under the bonnet applications, such as bumpers, body panels, trims, dashboard, door cladding, climate control units, air intake manifolds as well as battery cases. The appliance product range includes materials for small appliances and white goods, from coffeemakers to refrigerators and beyond. Borealis offers advanced polypropylene solutions which make engineering applications lighter, more energy efficient, robust and visually appealing.

**About Borealis and Borouge**

Borealis is a leading provider of innovative solutions in the fields of polyolefins, base chemicals and fertilizers. With headquarters in Vienna, Austria, Borealis currently employs around 6,200 and operates in over 120 countries. It generated EUR 7.5 billion in sales revenue in 2012. The International Petroleum Investment Company (IPIC) of Abu Dhabi owns 64% of the company, with the remaining 36% owned by OMV, the leading energy group in the European growth belt. Borealis provides services and products to customers

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around the world in collaboration with Borouge, a joint venture with the Abu Dhabi National Oil Company (ADNOC).

Building on the unique Borstar® and Borlink™ technologies and 50 years of experience in polyolefins, Borealis and Borouge support key industries including infrastructure, automotive and advanced packaging. The Borouge plant expansion in Abu Dhabi will be fully operational by mid-2014 with a total annual capacity of 4.5 million tonnes. After this Borealis and Borouge will have approximately 8 million tonnes of polyolefin capacity.

Borealis offers a wide range of base chemicals, including melamine, phenol, acetone, ethylene and propylene servicing a wide range of industries. Together with Borouge the two companies will produce approximately 6 million tonnes of Base Chemicals in 2014. Borealis also creates real value for the agricultural industry with a large portfolio of fertilizers. The company distributes approximately 2.1 million tonnes per year. This volume will increase to around 5 million tonnes by the end of 2014.

Borealis and Borouge aim to proactively benefit society by taking on real societal challenges and offering real solutions. Both companies are committed to the principles of Responsible Care®, an initiative to improve safety performance within the chemical industry, and contribute to solve the world's water and sanitation challenges through product innovation and their Water for the World™ programme.

**For more information visit:**

[www.borealisgroup.com](http://www.borealisgroup.com)  
[www.borouge.com](http://www.borouge.com)  
[www.waterfortheworld.net](http://www.waterfortheworld.net)

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