

Borealis supports Austrian face mask initiatives through production of meltblown fabrics on its unique pilot line in Linz

- **Transformation of meltblown pilot line in record time to increase supply of polypropylene (PP) filtration fabrics for high-quality face masks and supporting the regional population**
- **Recently developed proprietary PP meltblown resin Borealis HL912BF to enable production of superfine fibres with superior barrier and filtration properties**

Borealis announces that it has started production of meltblown fabrics for face mask applications on its unique pilot line in Linz, Austria. Borealis has managed quickly to convert the way of working from pure development to smaller scale pilot production to regularly produce rolls of fine fibre fabrics for face masks. Recently developed by Borealis, a new proprietary polypropylene (PP) meltblown resin has boosted filtration properties due to its capability for finer fibres. By exploiting a robust network of co-operation partners in the country, Borealis is helping bolster the supply of filtration media to increase face masks production.

Responding to the Covid-19 crisis with flexibility, collaboration and innovation

A broad variety of PP based meltblown fabrics might not be visible to us, but belong to our daily lives. Such advanced PP solutions for meltblown fabrics are used not only in household appliances (e.g. vacuum cleaners), but also air cooling and heating devices. Their crucial importance for the hygiene and healthcare industries – in particular for face masks and protective wear – has been made painfully apparent as the global coronavirus pandemic has led to dramatic global shortages of essential personal protective equipment (PPE) for healthcare workers and others.

Borealis holds a 35-year track record in **PP meltblown innovations and grades**, and the unique pilot line in Linz has played an important role in the development. The pilot line is now being re-purposed to help meet the need for face masks. By teaming up with value chain partners, local and regional governmental organisations and non-governmental organisations (NGOs), Borealis shows its dedication

to enhance health and safety of communities in which it does business. This is done by supplying filtration fabrics for face masks in order to quickly respond to an urgent need in the region. The temporarily converted small-scale pilot testing facilities are located in the Application Hall at Borealis Innovation Headquarters in Linz. The newly developed Borealis HL912FB is being used to produce meltblown fabric to be applied for customised inlays in cotton-based mouth-nose masks, for conventional mouth-nose masks, and also for high-end face masks worn by medical professionals (FFP1 to FFP3).

Unique PP meltblown resins for filtration excellence

A typical mask is made out of spunbonded outer layers and a meltblown middle layer. The spunbonded layers provide the structure while the meltblown layer is providing the barrier properties. For high-end FFP1 to FFP3 masks, more advanced meltblown structures with extremely fine fibres are essential. Borealis offers both the unique meltblown materials and a variety of spunbond PP grades.

The well-known Borealis meltblown resins HL708FB and HL712FB are reference grades for filtration. Recently, a new resin Borealis HL912FB was introduced to the market, which can be processed at higher processing temperatures allowing the production of even finer fibres. According to in-house testing, the use of Borealis HL912FB results in a significant improvement in filtration efficiency. All three grades are manufactured at Borealis facilities in Europe and made available to customers worldwide.

“The Covid-19 pandemic has led to a sudden steep increase in the need for PPE, while supply chains are being disrupted around the globe. We would like to assure our partners that we remain the reliable supplier of advanced polymers for the manufacture of high-quality face masks and other PPE,” says Lucrèce Foufopoulos, Borealis Executive Vice President Polyolefins, Innovation and Circular Economy Solutions. “True to our company purpose, ‘Life demands progress – we are re-inventing for more sustainable living’, we are offering innovative solutions like Borealis HL912FB and are re-purposing our own pilot facilities to a small-scale production line for meltblown fabrics. We have capitalised on our close collaboration with governments, NGOs and value chain partners to optimally deploy our innovation and manufacturing capabilities at the service of society.”



Photo: Meltblown pilot line in the Borealis Innovation Headquarters in Linz, Austria.
Photo: © Borealis



Photo: Roll of filtration fibres produced on the meltblown pilot line in the Borealis Innovation Headquarters in Linz, Austria.
Photo: © Borealis



Photo: Borealis meltblown and spunbond PP grades are in fact listed as reference grades at leading machine suppliers.

Photo: © Borealis

END

For further information, please contact:

Virginia Mesicek

Senior Manager a.i., External Communications

tel.: +43 1 22 400 772 (Vienna, Austria)

e-mail: virginia.mesicek@borealisgroup.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.

About Borealis:

Borealis is a leading provider of innovative solutions in the fields of polyolefins, base chemicals and fertilizers. With its head office in Vienna, Austria, the company currently has more than 6,900 employees and operates in over 120 countries. Borealis generated EUR 8.1 billion in sales revenue and a net profit of EUR 872 million in 2019. Mubadala, through its holding company, owns 64% of the company, with the remaining 36% belonging to Austria-based OMV, an integrated, international oil and gas company. Borealis provides services and products to customers globally, in collaboration with Borouge, a joint venture with the Abu Dhabi National Oil Company (ADNOC) and with Baystar™, a joint venture with Total and NOVA Chemicals in Texas, USA. www.borealisgroup.com

For more information visit:

www.borealisgroup.com

www.borealisgroup.com/polyolefins/consumer-products

www.stopoceanplastics.com

Anteo is a trademark of Borealis AG

Borstar is a registered trademark of Borealis AG