



PRODUCT NEWS

Borealis SH950MO brings clear impact

 BOREALIS

بروج
Borouge 



Deep freeze impact with transparency

Based on Borstar® Nucleation Technology (BNT), new Borealis SH950MO features a unique combination of transparency and good drop impact properties in low temperatures. Its performance is enhanced by higher flow (melt flow rate of 40) and better processability with improved stiffness.

Developed primarily for packaging of deep freeze products such as ice cream, frozen desserts and other frozen food items, Borealis SH950MO is also an excellent choice for broader consumer packaging and housewares when the combination of good impact performance with transparency is a top priority. Brand owners can develop visually appealing articles which offer a clear view of the contents without the fear of damage or brittle breakages. Also due to the good organoleptics properties, the taste and odour of the packed product will not be altered.

Improved processability with downgauging potential

The higher flowability of the new grade enables converters to use lower processing temperatures which, in combination with BNT, support energy and cycle time savings. Borealis SH950MO's improved formulation and higher stiffness leads to better demoulding properties, making processing easier and contributing to an overall more efficient production process.

One of the key aspects of the new Borealis SH950MO grade is the opportunity to downgauge. The high flowability and improved stiffness, both compared to the standard random PP grades, enable the use of thinner walls and more complex designs without compromising product properties or processing performance.

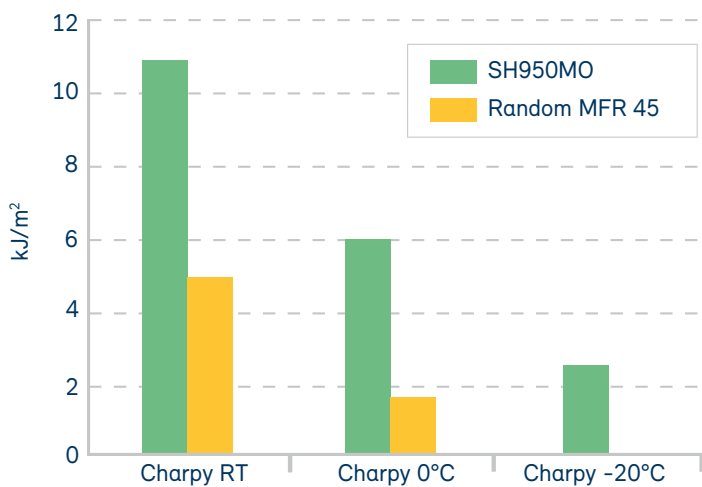


Figure 1: Impact performance of Borealis SH950MO vs standard random PP



Recommended applications areas

- Transparent thin wall packaging for deep freeze applications, like transparent ice cream packaging
- Other thin wall packaging requiring transparency and high impact
- Houseware articles, like food keepers and storage boxes
- High gloss caps and closures

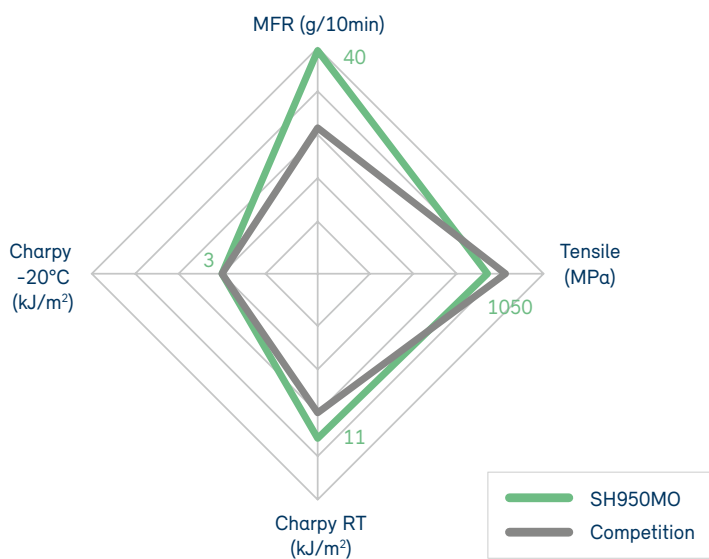


Figure 2: Performance of Borealis SH950MO and competition grade

Benefits throughout the value chain

- Visually appealing, see-through packaging with good impact performance
- Downgauging potential with reduced packaging weight due to the higher flowability and stiffness
- Easier processing due to the BNT technology, better flowability and demoulding
- Energy and cost savings due to the lower processing temperatures and faster cooling and cycle times, and reduced carbon footprint thereof

Property	SH950MO	BH348MO	Random MFR 45	Unit
MFR	40	50	45	g/10 min
Tensile modulus	1050	1050	1050	MPa
Charpy 23 °C	11	10	5	kJ/m ²
Charpy -20 °C	3	5	–	kJ/m ²
HDT	75	85	73	°C
Haze 1 mm	25	100	10	%
Other	BNT, reactor grade			

Making everyday life easier | Date of issue: August 2022

About Borealis Borealis is one of the world's leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals, fertilizers and the mechanical recycling of plastics. We leverage our polymers expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries. In re-inventing for more sustainable living, we build on our commitment to safety, our people and excellence as we accelerate the transformation to a circular economy and expand our geographical footprint.

With head offices in Vienna, Austria, Borealis employs 6,900 employees and operates in over 120 countries. In 2021, Borealis generated total sales and other income of EUR 10,153 million and a net profit of EUR 1,396 million. OMV, the Austria-based international oil and gas company, owns 75% of Borealis, 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

Disclaimer The information contained herein is to our knowledge accurate and reliable as of the date of publication. Borealis and Borouge extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the consequences of its use or for any errors. It is the customer's responsibility to inspect and test our products in order to satisfy himself as to the suitability of the products for the customer's particular purpose. The customer is also responsible for the appropriate, safe and legal use, processing and handling of our products. Nothing herein shall constitute any warranty (express or implied, of merchantability, fitness for a particular purpose, compliance with performance indicators, conformity to samples or models, non-infringement or otherwise), nor is protection from any law or patent to be inferred. Insofar as products supplied by Borealis and Borouge are used in conjunction with third-party materials, it is the responsibility of the customer to obtain all necessary information relating to the third-party materials and ensure that Borealis and Borouge products, when used together with these materials, are suitable for the customer's particular purpose. No liability can be accepted in respect of the use of Borealis and Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.

Borstar is a registered trademark of the Borealis Group. Borlink is a trademark of the Borealis Group.

FOR MORE INFORMATION:

visit www.borealisgroup.com and www.borouge.com

Borealis AG

Trabrennstr. 6-8 · A-1020 Vienna · Austria

Tel +43 1 22 400 000 · Fax +43 1 22 400 333

Borouge Pte Ltd · Sales and Marketing Head Office

1 George Street 18-01 · Singapore 049145

