



PRODUCT NEWS

# Borealis SH950MO brings clear impact

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## 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 (1050 MPa).

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.

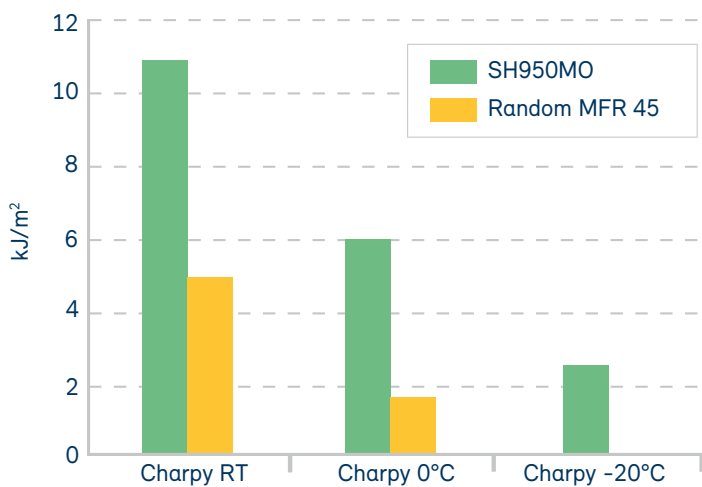


Figure 1: Impact performance of Borealis SH950MO vs standard random PP



## 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

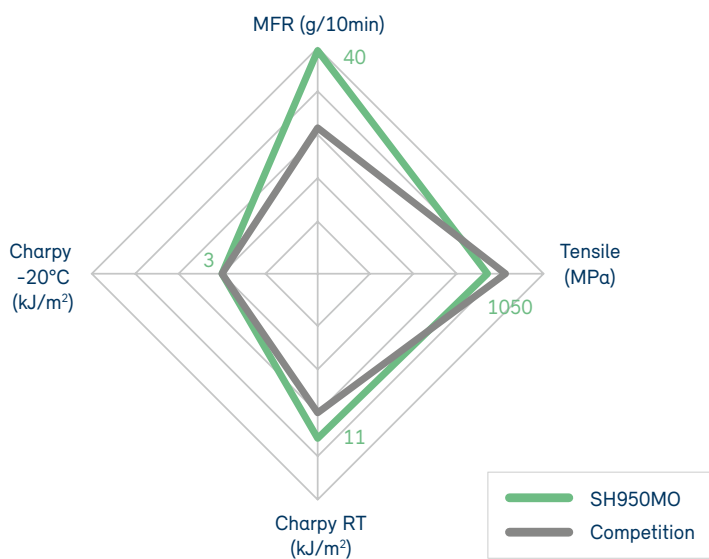


Figure 2: Performance of Borealis SH950MO and competition grade

## 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 <sup>2</sup>
Charpy -20 °C	3	5	–	kJ/m <sup>2</sup>
HDT	75	85	73	°C
Haze 1 mm	25	100	10	%
Other	BNT, reactor grade			

## Making everyday life easier | Date of issue: August 2022

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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).

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