

CASE STUDY

# Enhancing the sustainability and performance of caps & closures

BorPure™ RF777MO is the go-to solution to deliver high-performing closures and significantly reduce energy costs



In partnership with



بروج  
Borouge



# BorPure™ RF777MO improves impact and transparency of closures made by Bosisio Francesco & C. SpA, while achieving an overall lower environmental footprint

Designed for hinge cap applications, and based on proprietary Borstar® Nucleation Technology (BNT), this new resin makes everyday life easier with its excellent organoleptic performance, and ensures sustainability is at the centre of caps and closures applications.

It's why Bosisio Francesco & C. SpA, a leading specialist in the manufacture of caps for detergents, cosmetics and food products, chose BorPure™ RF777MO – a next generation random polypropylene – for their lines of hinge caps. Bosisio Francesco & C. SpA operates in the beauty and care markets, where outstanding transparency and impact performance is required. And because BorPure RF777MO offers these qualities, it's proven to be an ideal grade for the production of hinge caps for hand sanitisers, developed in response to the COVID-19 pandemic.

On top, as Borealis Borstar® Nucleation Technology allows reduction in energy consumption above 6%, through the possibility of reducing the extruder temperature, BorPure RF777MO allowed to optimise the rising energy costs the industry is facing.



## Meeting industry demands with excellent organoleptics

BorPure RF777MO enables Bosisio Francesco & C. SpA, and the wider caps and closures industry, to respond to a broad and diverse set of requirements. Converters demand innovative material solutions that reduce energy consumption and increase productivity on injection moulding lines. Resins must offer easy processability, consistency and high quality, as well as provide optimal performance on the capping line. For brand owners and final consumers, caps and closures must secure package contents, provide ideal organoleptic properties, be safe and convenient, stand out on shelf and offer the lowest environmental impact.

With great taste and odour properties, BorPure RF777MO enables Borealis to support Bosisio Francesco & C. SpA in fulfilling this diverse range of sophisticated demands. It offers:

- **Excellent organoleptic properties, rigorously tested and confirmed in Europe, which are suitable for even the most sensitive food and beverage applications**
- **High transparency in combination with excellent gloss and hinge performance**
- **Hinged caps that are especially robust, demonstrating outstanding hinge strength and stability**
- **100% recyclability as a monomaterial solution.**


## Four ways BorPure RF777MO enhances sustainability

1. **Reduces cycle times by more than 10% for certain cap applications, thanks to fast crystallisation behaviour enabled by BNT.**

2. **Lowers impact of colouring on dimensional stability due to the possibility of fast colour change during processing, without having to change process parameters.**

3. **Reduces energy consumption above 6% thanks to lower extruder temperatures. The result varies depending on the specific equipment installed.**

4. **Lowers overall CO2 footprint as a result of reduced energy consumption and faster cycle times on injection moulding lines.**



“Packaging suitable for e-commerce and home deliveries is the new normal for most of our customers. This increases the demand requirements on drop performance, which we have to deliver alongside good aesthetics and material downgauging. With BorPure RF777MO, we can react more quickly depending on our customer’s priorities, either by maintaining the same cap thickness and improving impact, or reducing the weight of the cap while increasing transparency.”

Simone Bosisio, Production Manager  
Bosisio Francesco & C. SpA

“To advance sustainability in packaging, you have to listen your customer’s needs and look at how you can improve every step of the value chain. Faster cycles allow energy savings which, coupled with lighter but sturdier caps, mean less breakages and lower transport costs for our customers.”

Alice Bosisio, Marketing Manager  
Bosisio Francesco & C. SpA

“Sustainability lies at the heart of all our new caps and closures applications, together with the aim of making everyday life easier for the final consumer. Our collaboration with Bosisio Francesco & C. SpA clearly demonstrates how Borealis is reinventing for more sustainable living.”

Meta Cigon, Marketing Manager  
Consumer Products, Borealis

If you are interested in the organoleptics and sustainability offered by BorPure RF777MO, please contact [borealisgroup.com/contact](https://borealisgroup.com/contact)



**Borealis and Borouge packaging solutions are making everyday life easier**

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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).

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