

PRODUCT NEWS

Borealis HC609TF

High-stiffness polypropylene homopolymer for demanding thermoforming applications



BOREALIS

بروج
Borouge





Introducing Borealis HC609TF, an advanced solution for modern thermoformed packaging applications

Borealis has expanded its thermoforming portfolio with Borealis HC609TF, a high-stiffness polypropylene (PP) homopolymer designed to meet the stringent demands of modern packaging. Delivering outstanding transparency, enhanced stiffness, and superior processability, this high-performance grade provides a versatile and efficient solution for a wide range of thermoformed applications, while also supporting the transition to a circular economy.

Key properties

- Excellent transparency
- Enhanced stiffness
- Antistatic properties
- Nucleated

Key applications

Borealis HC609TF is ideal for a wide range of thermoforming applications, including:

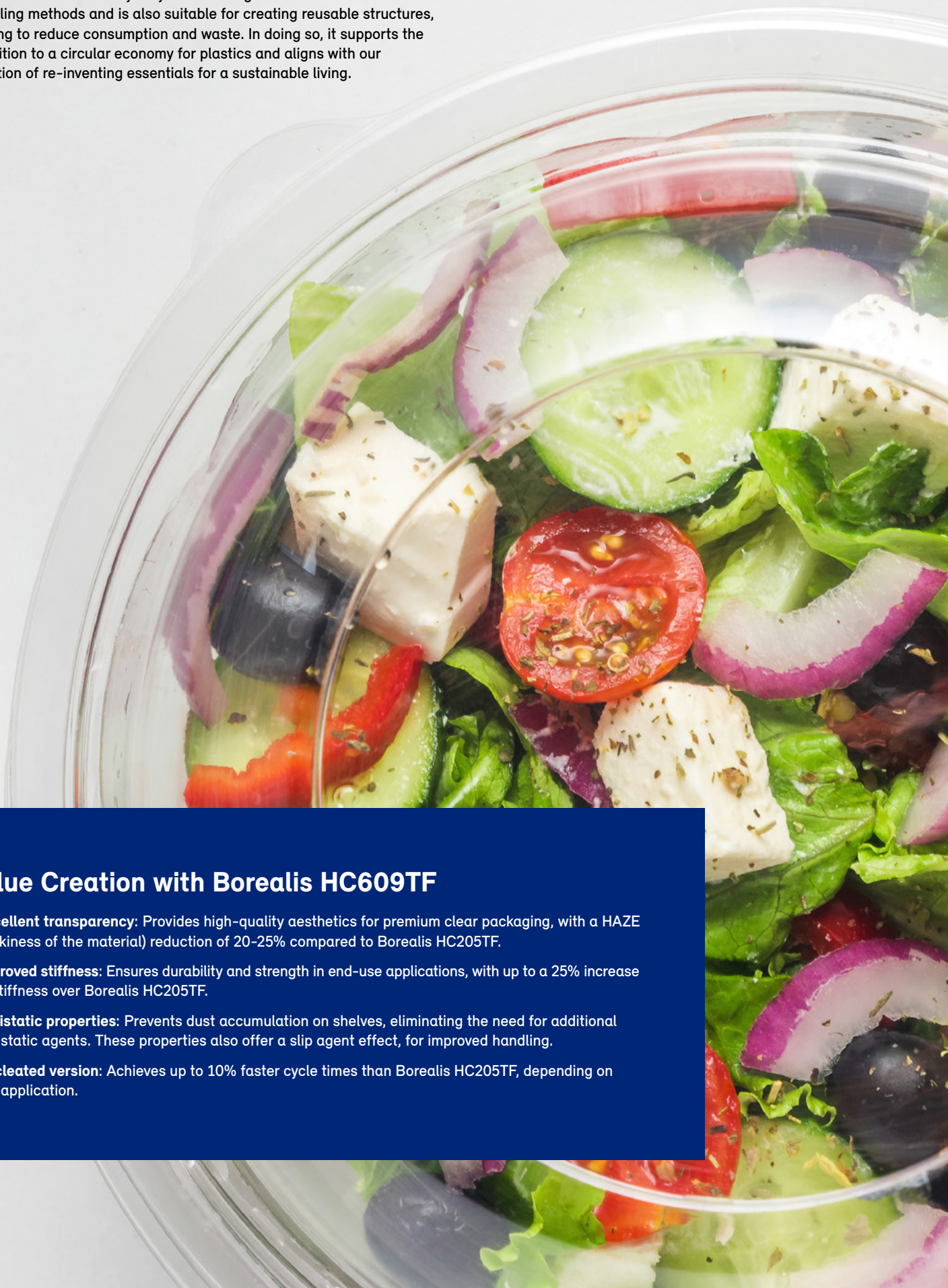
- High-transparency trays
- Cups
- Containers

Designed for circularity

Borealis HC609TF is fully recyclable through both mechanical and chemical recycling methods and is also suitable for creating reusable structures, helping to reduce consumption and waste. In doing so, it supports the transition to a circular economy for plastics and aligns with our ambition of re-inventing essentials for a sustainable living.

Value Creation with Borealis HC609TF

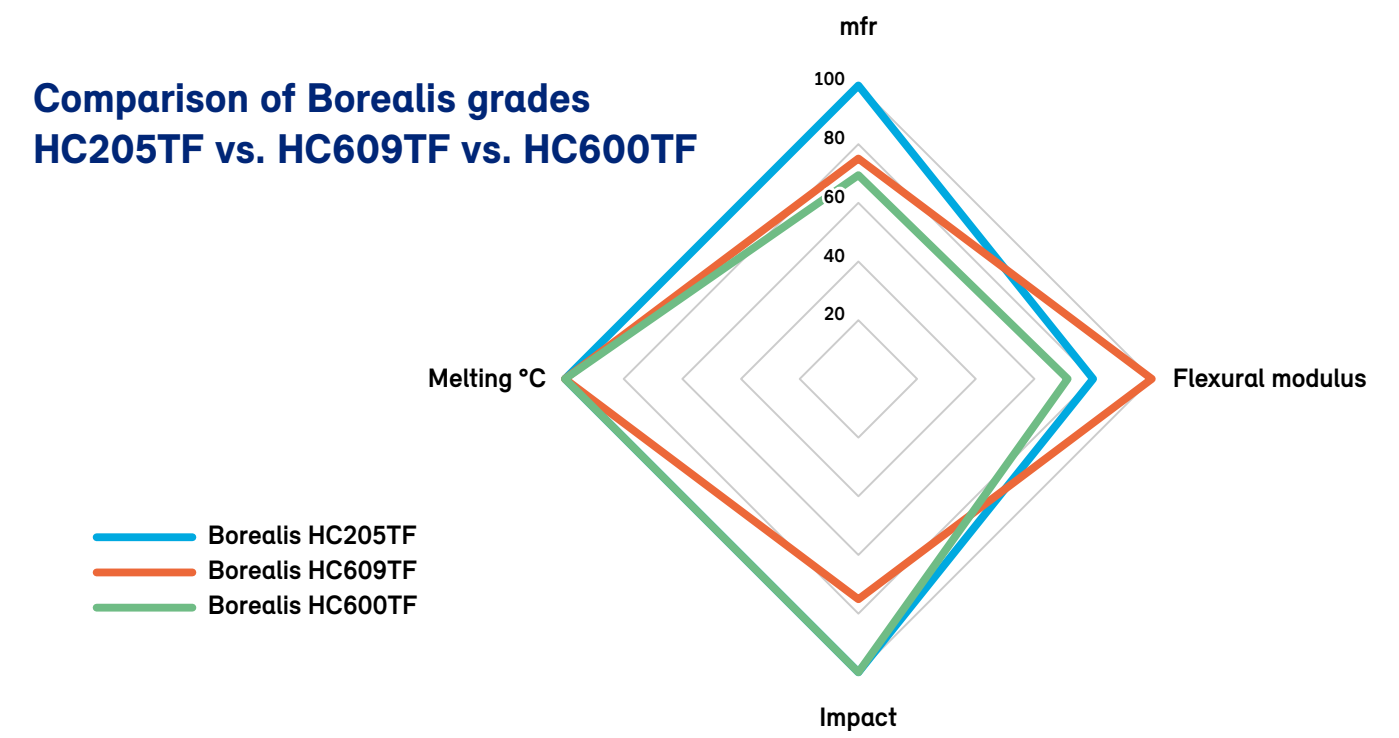
- **Excellent transparency:** Provides high-quality aesthetics for premium clear packaging, with a HAZE (milkyiness of the material) reduction of 20-25% compared to Borealis HC205TF.
- **Improved stiffness:** Ensures durability and strength in end-use applications, with up to a 25% increase in stiffness over Borealis HC205TF.
- **Antistatic properties:** Prevents dust accumulation on shelves, eliminating the need for additional antistatic agents. These properties also offer a slip agent effect, for improved handling.
- **Nucleated version:** Achieves up to 10% faster cycle times than Borealis HC205TF, depending on the application.



Borealis HC609TF provides a cost-effective, circular solution for a wide range of thermoforming applications. To better understand the properties and performance of Borealis HC609TF in comparison with other thermoforming grades, refer to the table below:

Grade	MFR (g/10min)	Flexural Modulus (MPa)	Melting Temperature (°C)	Key Properties
PP HC205TF	4.0	1700	161	Good transparency, fast cycle, excellent organoleptics
PP HC600TF	2.8	1500	164	High gloss, good transparency, excellent organoleptics
PP HC609TF	3	2050	167	Fast cycle, good transparency, improved stiffness

Table: Comparison of Borealis thermoforming grades



Graph: Comparison of Borealis grades

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 sustainable polyolefin solutions. In Europe, Borealis is also an innovative leader in polyolefins recycling and a major producer of base chemicals. We leverage our polymer expertise and decades of experience to offer value-adding, innovative and circular material solutions for key industries such as consumer products, energy, healthcare, infrastructure and mobility.

With operations in over 120 countries and head offices in Vienna, Austria, Borealis employs around 6,000 people. In 2022, we generated a net profit of EUR 2.1 billion. OMV, the Austria-based international oil and gas company, owns 75% of our shares. The Abu Dhabi National Oil Company (ADNOC), based in the United Arab Emirates (UAE), owns the remaining 25%.

In re-inventing essentials for sustainable living, we build on our commitment to safety, our people, innovation and technology, and performance excellence. We are accelerating the transformation to a circular economy of polyolefins and expanding our geographical footprint to better serve our customers around the globe. Our operations are augmented by two important joint ventures: Borouge (with ADNOC, headquartered in the UAE), and Baystar™ (with TotalEnergies, based in the US).

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