



Bridging the performance gap together

Queo™ 6201LA-P

Background

Polypropylenes (PP) require impact modification to lift low temperature impact performance of the PP to a usable level for the automotive industry, among others. These compounds are referred to as TPOs. TPOs are physical mixtures, or blends, of a semi-crystalline polyolefin (mostly PP) with amorphous elastomeric polymers (such as polyolefin elastomers: POE) to improve low temperature impact performance of the PP. TPOs are produced by melt-blending the PP and elastomer components, most often by using the twin screw mixer. The automotive industry is the largest end user of TPO – mainly in exterior components.

Challenge

Until now, customers in the automotive industry have experienced limited choice due to the few suppliers of the lowest density elastomer ideal for this type of modification, and even fewer with local European production. This sort of temperature sensitive material is best produced and supplied locally to prevent the material arriving at the converter's premises fused together, no longer as free flowing granules. Converters without access to the best-in-class impact block-PP's need this type of elastomer to produce TPOs with benchmark performance.

Solution

Queo 6201LA-P, the new polyolefin elastomer (POE) from Borealis, solves these issues. With a density of 862kg/m³, it has the softness and flexibility required for TPO production, producing amorphous structures able to withstand abuse at low temperatures. It is an excellent impact modifier with minimal antioxidants by design, enabling customers to conduct their own mixing and create their own recipes.

Queo™ 6201LA-P is protected with talcum powdering to ensure the free flowing of granules in transport and warehousing. This reduces the risk of fusing – a common issue that forces customers to take costly counter measures.

Benefits



- Allows benchmark TPO production in automotive and construction industries.
- Provides customers with an alternative option when sourcing POE.
- Highly amorphous structure with outstanding low temperature impact.
- Available as free flowing granules for continuous compounding and talcum powdered to protect against the fusing of granules.
- Melt Flow Rate of the Queo 6201LA-P is better adapted to the MFR of the used impact Block-PP's for easy dispersion, resulting in improved low temperature impact performance.
- Excellent polymer modifier.

Product News

Bridging the performance gap together

Queo™ 6201LA-P

Queo™ 6201LA-P

Density (kg/m ³) ISO 1183	MFR (dg/min) 2.16kg/190°C ISO 1133	DSC peak melt point (°C) ISO 11357	Film applications	Extrusion coating	Sound deadening and other automotive	Flexible sheets	Wire and cables	PP impact modification	Injection moulded articles	Compounds and master-batches	Synthetic corks	Adhesives	Caps and closures	Foams	Extras
862	1.0	49			✓			✓		✓					<ul style="list-style-type: none"> • Low anti-oxidant package • Talcum dusted

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.borealiseminds.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.

Queo is a trademark of Borealis AG.