PRODUCT NEWS

Bridging the performance gap together

Queo™ 6201LA-P

BOREALIS بروج Borouge

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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.**

Queo™ 6201LA-P

Density (kg/m³) 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	35			✔			✔		✔					– Low anti-oxidant package – Talcum dusted

Together we can

About Borealis Borealis is a leading provider of innovative solutions in the fields of polyolefins, base chemicals and fertilizers. With its head office in Vienna, Austria, the company currently has around 6,600 employees and operates in over 120 countries. Borealis generated EUR 7.5 billion in sales revenue and a net profit of EUR 1,095 million in 2017. Mubadala, through its holding company, owns 64% of the company, with the remaining 36% belonging to Austriabased OMV, an integrated, international oil and gas company. Borealis provides services and products to customers around the world in collaboration with Borouge, a joint venture with the Abu Dhabi National Oil Company (ADNOC). Borealis and Borouge aim to proactively benefit society by taking on real societal challenges and offering real solutions. Both companies are committed to the principles of Responsible Care®, an initiative to improve safety performance within the chemical industry, and work to solve the world's water and sanitation challenges through product innovation and their Water for the World programme.

For more information visit: **borealisgroup.com** · **borouge.com** · **waterfortheworld.net**

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