ARLANXEO developed high-quality Keltan® EPDM products with enhanced sustainability

Düsseldorf - ARLANXEO, a leading global player in performance elastomers, is addressing challenges faces today. These include reduction of greenhouse gas emissions, greater fuel efficiency and lower dependency on fossil fuels.

“ARLANXEO is preparing for the future by developing a more sustainable EPDM production technology”, says Niels van der Aar, ARLANXEO’s Head of Technical Service and Application Development for Keltan Elastomers. “Key examples include the use of Keltan ACE™ catalyst technology, and the recent introduction of Keltan® Eco EPDM grades, the world’s first EPDM rubber based on bio-ethylene.”

ARLANXEO has successfully introduced Keltan ACE™ technology in its largest plant in Geleen (The Netherlands) and in Changzhou (China). As the Keltan ACE™ catalyst is extremely productive and polymerization can take place at much higher temperatures than the conventional Ziegler Natta catalysts, the new post-metallocene technology is very energy efficient. Customers have evaluated, approved and implemented the Keltan ACE™ grades in the market since 2013.

Keltan® Eco EPDM is a recent ARLANXEO development, produced from bio-based ethylene, supplied from Braskem S.A., which originates from sugar cane. Depending on the ethylene content of the particular grade, the bio-based content of Keltan® Eco EPDM rubber ranges between 50% and 70%. Detailed studies have shown that the polymer characteristics and the technical performance of Keltan® Eco EPDM are identical to those of the corresponding conventional products. Independent Life Cycle Assessments of Keltan® Eco EPDM grades versus their equivalent Keltan® EPDM product have shown that the CO₂ emission is reduced by more than 50%, or in other words Keltan® Eco EPDM saves the emission of 4-6 barrels of oil used for production per mt EPDM. Today these new bio-based EPDM grades are commercially applied in applications, such as low-weight, micro-porous automotive solid seals, recyclable TPVs, flooring and window seals.
"Our commitment to sustainability goes beyond our products", says Niels van der Aar. "Recently ARLANXEO published extensive studies on increasing the sustainability of thermoset compounds by combining Keltan® Eco with sustainable alternatives for plasticizer oils and fillers. End of October, we will also publish our work for thermoplastics: bio-based TPVs with >80% sustainable content. Or better: bio-based materials combined with recyclability."

Keltan is a product of the business unit High Performance Elastomers.

High Performance Elastomers
High Performance Elastomers (HPE), a business unit of the ARLANXEO group, offers its customers a broad portfolio of technical elastomers. As one of the leading suppliers of synthetic elastomers to the rubber-processing industry, HPE markets materials which have a wide range of industrial applications. For example, they are used as modifiers for plastic and adhesive raw materials, in gas and oil exploration and production, and in functional components for the automotive and cable industries.

About ARLANXEO
ARLANXEO is a world-leading synthetic rubber company with sales of around EUR 2.8 billion in 2015, about 3,800 employees and a presence at 20 production sites in nine countries. The company’s core business is the development, manufacturing and marketing of high-performance rubber for use in, for example, the automotive and tire industries, the construction industry, and the oil and gas industries. ARLANXEO was established in April 2016 as a joint venture of LANXESS and Saudi Aramco.


"Bio-based EPDM rubber and sustainable EPDM compounding", to be published in "Lightweight and Sustainable Materials for Automotive Application" by Ford Motor Company (2016)
Keltan® bio-based EPDM grades in window seals.
(Photo ARLANXEO, ARPR007)

High-quality Keltan® EPDM products with enhanced sustainability.
(Photo ARLANXEO, ARPR007)
Press Release

This press release and relevant photography can be downloaded from www.PressReleaseFinder.com. Alternatively for very high resolution pictures please contact Blanche Janssen (blanche.janssen@arlanxeo.com, +31 46 7020677).

Forward-Looking Statements.
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Information for editors:
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