

INNOVATIVE SOLUTIONS FOR PLASTIC COMPOUNDS

- › **IMPACT MODIFIER**
- › **COUPLING AGENT**
- › **RECYCLING BOOSTER**
- › **COMPATIBILISER**



SK FUNCTIONAL POLYMER TECHNICAL SOLUTIONS



COMPREHENSIVE PRODUCT PORTFOLIO

Extensive range of innovative solutions for the most demanding plastic compound formulations in automotive, E&E, packaging and monofilament markets.

- › **Lotryl**[®] ethylene-acrylate copolymers (EMA, EBA)
- › **Lotader**[®] ethylene-acrylate-maleic anhydride terpolymers (EMA-MAH, EBA-MAH, EEA-MAH)
- › **Lotader**[®] **AX** ethylene-acrylate-glycidyl methacrylate terpolymers (EMA-GMA, EBA-GMA, E-GMA)
- › **Orevac**[®] maleic anhydride grafted polyolefins (PE, PP, EVA)

› HIGH PRODUCT CONSISTENCY

30 years of experience supplying specialty functional polyolefins products from manufacturing facilities in Europe and in the USA. Manufactured to the same standards worldwide, product consistency and reliability requirements are successfully delivered.

› TECHNICAL SUPPORT FOR BUSINESS GROWTH

A global technology network with technical applications expertise, providing customers with local support and new product innovations to meet future performance requirements. With an in-depth knowledge of polymer processing, our technical experts have a long track record of successfully developing products for the plastic industry.



APPLICATIONS

› IMPACT MODIFIER

Improve mechanical properties and especially impact strength for inherent brittleness occurring at sub-zero temperatures and crack propagation

- Polyesters: PBT and PET
- Polyamides: PA 6, PA 66, PA 11 and PA 12
- PPS
- PC
- ABS
- PLA

› COMPATIBILISER FOR POLYMER ALLOYS & BLENDS

Improve interfacial adhesion between two incompatible polymers and reduce the dispersed phase domain size, producing better impact resistance and elongation at break

- PET and PE & PP
- EVOH and PE & PP
- PLA and PE & PP
- PA and PE & PP
- PA and PBT
- PC and ABS
- PC and PBT & PET

› COUPLING AGENT FOR FILLED POLYOLEFINS

Improve adhesion between the filler and the polymer composite at room temperature and under high-stress conditions

- Glass Fibers and PE & PP
- Mineral Fillers (Talc, CaCO_3 , Mica, Wollastonite, Kaolin, BaSO_4) and PE & PP
- Natural Fibers (Wood, Hemp, Sisal, Flax, BKP, Bamboo) and PE & PP
- HFFR ($\text{Al}(\text{OH})_3$, $\text{Mg}(\text{OH})_2$) and PE & PP & EVA

› RECYCLING BOOSTER

Improve mechanical recycling performance of post-consumer waste in order to meet sustainability requirements

- PET and PE & PP
- EVOH and PE & PP
- PA and PE & PP
- PET
- ABS
- PC and ABS

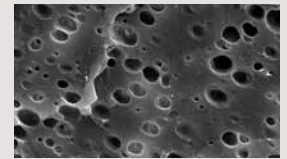
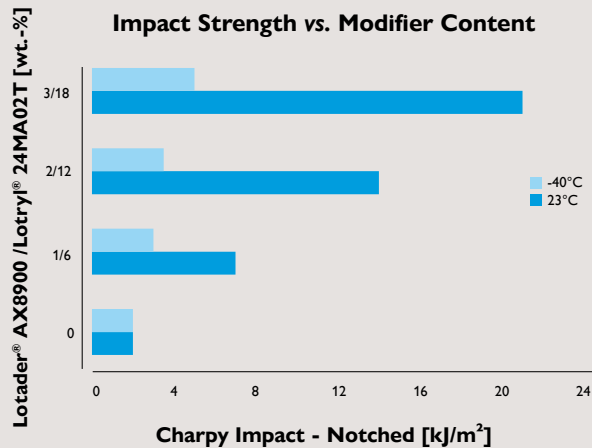
CASE STUDIES



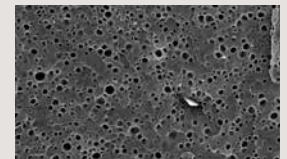
CASE STUDY #1

Toughening Crystallised PET

Crystallised PET (cPET) trays are widely used for packaging frozen meals. These trays require excellent low temperature toughness as they are packaged at temperatures in the -20 to -40°C range. The combination of Lotryl® 24MA02T and Lotader® AX8900 terpolymer can provide the required low-temperature toughness.



Without Lotader® AX8900

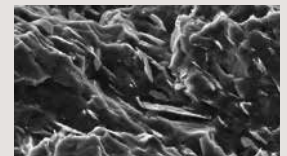
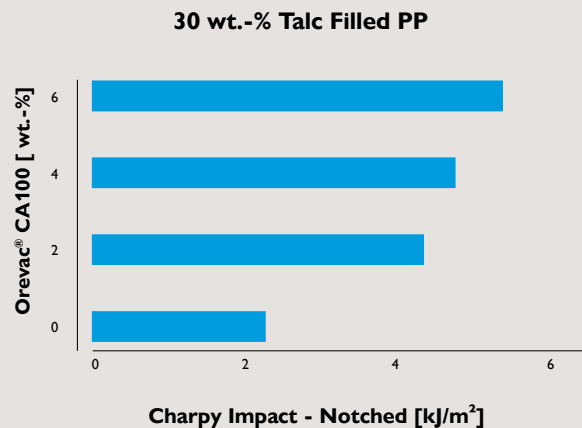


With Lotader® AX8900
Improved dispersion in PET

CASE STUDY #2

Improved Filler Dispersion

Polypropylene talc filled compounds are widely used in the automotive industry for UTH, interior and exterior injection moulded parts but sometimes do not provide adequate toughness. Using Orevac® CA100 as coupling agent significantly enhances filler dispersion and improves impact performance with balanced stiffness.



Without Orevac® CA100
Heterogeneous matrix with poor talc dispersion



With Orevac® CA100
Homogeneous with matrix with embedded talc in PP

SK Functional Polymer (SKFP) is a newly established company headquartered in Paris, France, following the acquisition of Arkema's Functional Polyolefins business by SK Global Chemical in June 2020. SK Functional Polymer has more than 50 years of experience in the development and supply of specialty polyolefins products from manufacturing facilities in Europe (Balan, Carling and Mont). SKFP products are sold under the brand names of Lotader®, Lotryl®, Orevac® and Evatane®. They are used in applications such as Packaging, Automotive, Construction and also in the Circular Economy. SKFP produces its resins in three main plants located in Europe. SKGC, mother company of SKFP, proposes a wide range of plastic materials for the Packaging and Automotive industries.

Disclaimer: Please consult SK Functional Polymer disclaimer regarding the use of SK FP products on www.sk-fp.com

Regulatory information: for information on regulatory compliance, consult your local representative. Read and understand the Material Safety Data Sheet (MSDS) before using these products.

