

Royalflex™

Royalflex™ modifiers of Engineering Polymers provide:



- Polymer Modification**
- Impact Modification**
- Compatibilizer**
- Filler Coupling Agent**
- Adhesion Promoter**

Lion Copolymer offers the Royalflex™ family of maleic anhydride (MAH) grafted EPDM (ethylene propylene diene terpolymer) polymers. These modifiers are very well suited to enhance the performance of a variety of engineering thermoplastics and other polymers.

Royalflex™ 035	(MAH @ 0.35 %)
Royalflex™ 050	(MAH @ 0.50 %)
Royalflex™ 100	(MAH @ 1.00%)
Royalflex™ 120	(MAH @ 1.20 %)
Royalflex™ 170	(MAH @ 1.70 %)

The Royalflex™ family of modifiers is produced via reactive extrusion to graft functional groups. This achieves significant improvements opposite untreated materials in specific application parameters, for example resistance to impact at low temperature in toughened polymers and improved compound consistency and surface improvement in filled compounds.

The market place is demanding continually higher performance from all technical polymers such as engineering thermoplastics and alloys to replace alternative materials. Engineering thermoplastics are growing in an ever-increasing list of applications, which brings new technical challenges.

Royalflex™ modifiers can help customers meet these demanding challenges and facilitate the extending of their application capabilities.

Applications

Polymer Modification

Royalflex™ modifiers can improve the performance of engineering thermoplastics and other technical polymers. The saturated backbone of Royalflex™ imparts properties of heat stability, elasticity and chemical resistance.

Impact Modification

Royalflex™ modifiers can improve the polymer toughness. With optimal dispersion, the elastomeric phase of the Royalflex™ modifier can increase impact strength and elongation.

In nylon at high levels, Royalflex™ modifiers provide low temperature impact resistance (down to -40°C) while maintaining good heat resistance.

Compatibilizers

Royalflex™ modifiers act as a surfactant to increase intimate mixing of polymer blends and achieve compatibility between most common polar polymers to optimize performance properties.

Coupling Agents

Royalflex™ modifiers are coupling agents that provide chemical bonding between the polymer and mineral fillers or fiber reinforcements.

Adhesion Promoters

When added to hydrocarbon polymers such as polyethylene and polypropylene, Royalflex™ modifiers can enhance adhesion to substrates and materials such as metal, thermoset rubbers and most polar substrates, like glass.

For more information on Royalflex™ modifiers
please contact your local sales office or Lion Copolymer customer service.

