

LOTADER[®] 4700

LOTADER[®] 4700 is a random ethylene – ethyl acrylate - maleic anhydride terpolymer.

LOTADER[®] 4700 resins:

- Acrylic ester brings softness and polarity, while keeping high thermal stability during processing.
- The high content of acrylic ester leads to high flexibility (low crystallinity) and high impact absorption behavior.
- Maleic anhydride gives reactivity (towards OH and NH₂ groups), leading to optimal dispersion during melt mixing with engineering thermoplastics (mainly polyamides).

LOTADER[®] 4700 is suitable as modifier to improve the impact strength of polyamides (PA6, PA66, PA12 etc.). It can also be used as a compatibilizer for polyamides / polyolefins blends.

Typical Properties

	Test Method	Unit	Typical Value
Melt Index (190°C/2.16kg)	ISO 1133	g/10min.	7
Ethyl Acrylate Content	FTIR (internal method)	%wt.	29
Maleic Anhydride Content	FTIR (internal method)	%wt.	1.3
Melting Point	ISO 11357	°C	65
Density	ISO 1183	g/cm ³	0.94
Vicat Softening Temperature	ISO 306	°C	< 40
Tensile strength at break ¹	ISO 527 / ASTM D638	MPa	5
Elongation at break ¹	ISO 527 / ASTM D638	%	800
Flexural Modulus ¹	ISO 178	MPa	< 30

¹: On compression molded samples.

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Processing

Heat stability of acrylate comonomers allows processing temperatures as high as for polyamides, which is the main material using LOTADER® 4700 as impact modifier. However, to minimize the generation of gels, it is recommended to purge the equipment with LDPE after a run is completed.

LOTADER® 4700 is not corrosive.

Storage, Handling & Safety

LOTADER® 4700 should be stored in a ventilated area, away from heat, humidity and direct sunlight. Improper storage conditions may cause degradation and could have consequences on physical properties of the product.

Due to its physical properties (Vicat temperature <40°C), it may be possible that the LOTADER® 4700 shows some caking. This is particularly true during summertime.

Safety data sheet as well as information on handling and storage of the LOTADER® 4700 are available upon request to your SK Functional Polymer representative or at www.sk-fp.com.

Shelf Life

Three years from the date of delivery, in unopened packaging. For any use above this limit, please refer to our technical services.