Technical Data Sheet
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LOTADER® 4700

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

- 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 provides reactivity (towards OH and NH_2 groups), leading to optimal dispersion during melt mixing with engineering thermoplastics.

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

Typical Properties

	Test Method	Unit	Typical Value
Ethyl Acrylate Content	FTIR (internal method)	%.-wt.	29
Maleic Anhydride Content	FTIR (internal method)	%.-wt.	1.3
Melt Index (190°C/2.16kg)	ISO 1133 / ASTM D1238	g/10min.	7
Melting Point	ISO 11357-3	°C	65
Vicat Softening Temperature (10N)[1]	ISO 306 / ASTM D1525	°C	< 40
Density	ISO 1183 / ASTM D1505	g/cm^3	0.94
Flexural Modulus[1]	ISO 178 / ASTM D790	MPa	< 30
Elongation at break[1]	ISO 527-2 / ASTM D638	%	800
Tensile strength at break[1]	ISO 527-2 / ASTM D638	MPa	5

[1]: On compression molded samples.

Processing

Heat stability of acrylate comonomer allows processing temperatures as high as for polyamides. 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 is usually packed in waterproof bags or rigid containers with waterproof liner. It should be stored in dry conditions and be kept out of moisture in an aerated building.

Improper storage conditions may cause degradation and could have consequences on physical properties of the product. It is recommended to reseal the bag or the liner after use to protect LOTADER® 4700 against moisture.

Safety data sheet as well as information on handling and storage of the LOTADER® 4700 is available upon request to your SK Functional Polymer representative.

Shelf Life

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