

# LOTADER<sup>®</sup> AX8700

LOTADER<sup>®</sup> AX8700 is a random ethylene-butyl acrylate-glycidyl methacrylate 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 behaviour.
- Glycidyl methacrylate gives reactivity (versus OH, COOH and NH<sub>2</sub> groups), leading to optimal dispersion during melt mixing with engineering thermoplastics.
- As an ethylene copolymer, LOTADER<sup>®</sup> AX8700 is compatible with LDPE in all proportions, and with almost all other ethylene copolymers.

LOTADER<sup>®</sup> AX8700 is suitable as an additive to improve impact strength of engineering thermoplastics (PPS, PBT, PET) and PC/PBT, PC/PET and PC/ABS alloys. Lotader<sup>®</sup> AX8700 can be used as a compatibiliser for polyesters/polyolefins blends, as bitumen performance enhancer and adhesion promoter onto metallic surface.

## Typical Properties

	Test Method	Unit	Typical Value
Butyl Acrylate Content	FTIR (internal method)	%.-wt.	25
Glycidyl Methacrylate Content	FTIR (internal method)	%.-wt.	8
Melt Index (190°C/2.16kg)	ISO 1133 / ASTM D1238	g/10min.	9
Melting Point	ISO 11357-3	°C	72
Density	ISO 1193 / ASTM D150	g/cm <sup>3</sup>	0.93
Vicat Softening Temperature (10N) <sup>1</sup>	ISO 306 / ASTM D1525	°C	<40
Flexural Modulus <sup>1</sup>	ISO 178 / ASTM D790	MPa	11
Elongation at Break <sup>1</sup>	ISO 527-2 / ASTM D638	%	860
Tensile Strength at Break <sup>1</sup>	ISO 527-2 / ASTM D638	MPa	4

<sup>1</sup>: On compression molded samples.

## Processing

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Heat stability of acrylate comonomer allows processing temperatures as high as for polyesters (PBT, PET) and PPS.

**CAUTION:** LOTADER® AX8700 reacts with polymers containing maleic anhydride and acid. This reaction may generate gels and can block an extruder if not controlled. Extruders must be thoroughly purged before and after extrusion.

### **Storage, Handling & Safety**

LOTADER® AX8700 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.

Due to its physical properties (Vicat temperature <40°C), it may be possible that the LOTADER® AX8700 shows some caking. This is particularly true during summer time.

Safety data sheet as well as information on handling and storage of the LOTADER® AX8700 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.

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