

# LOTADER<sup>®</sup> AX8900

LOTADER<sup>®</sup> AX8900 is a random ethylene-methyl acrylate-glycidyl methacrylate terpolymer (E-MA-GMA).

- 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> AX8900 is compatible with LDPE in all proportions, and with almost all other ethylene copolymers.

LOTADER<sup>®</sup> AX8900 is suitable as:

- additive to improve impact strength of engineering thermoplastics (PPS, PBT, PET) and PC/PBT, PC/PET and PC/ABS alloys,
- compatibilizer for polyesters/polyolefins blends and in some formulated adhesive tapes,
- bitumen performance enhancer / additive for asphalt modification,
- adhesion promoter onto metallic surface.

## Typical Properties

|                                                | Test Method            | Unit              | Typical Value |
|------------------------------------------------|------------------------|-------------------|---------------|
| Melt Index (190°C/2.16kg)                      | ISO 1133               | g/10min.          | 6             |
| Methyl Acrylate Content                        | FTIR (internal method) | %wt.              | 24            |
| Glycidyl Methacrylate Content                  | FTIR (internal method) | %wt.              | 8             |
| Melting Point                                  | ISO 11357              | °C                | 65            |
| Density                                        | ISO 1183 / ASTM D792   | g/cm <sup>3</sup> | 0.95          |
| Vicat Softening Temperature (10N) <sup>1</sup> | ISO 306                | °C                | <40           |
| Tensile Strength at Break <sup>1</sup>         | ISO 527 / ASTM D638    | MPa               | 4             |
| Elongation at Break <sup>1</sup>               | ISO 527 / ASTM D638    | %                 | 1100          |
| Flexural Modulus <sup>1</sup>                  | ISO 178 / D790         | MPa               | <30           |

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

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## Processing

Heat stability of acrylate comonomer allows processing temperatures as high as for polyesters (PBT, PET) and PPS, which are the main material using LOTADER® AX8900 as impact modifier.

**CAUTION:** LOTADER® AX8900 reacts with polymers containing maleic anhydride and acid. This reaction may generate gels or can block an extruder if not controlled. Extruders must be thoroughly purged before and after extruding LOTADER® AX8900.

## Storage, Handling & Safety

LOTADER® AX8900 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® AX8900 shows some caking. This is particularly true during summertime.

Safety data sheet as well as information on handling and storage of the LOTADER® AX8900 are available upon request to your SK Functional Polymer representative or at [www.sk-fp.com](http://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.

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