

Technical Data Sheet Date Prepared: May 2024

# LOTADER® AX8840

LOTADER® AX8840 is a random ethylene - glycidyl methacrylate copolymer (E-GMA).

- 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® AX8840 is compatible with LDPE in all proportions, and with almost all other ethylene copolymers.
- LOTADER® AX8840 exhibits good adhesion on PET, PBT, PPS, metal, paper, glass.

**D**ue to its reactivity induced by the glycidyl methacrylate, **L**OTADER® AX8840 can be used as:

- a compatibilizer for polyesters/polyolefins blends,
- a bitumen performance enhancer / additive for asphalt modification,
- an adhesive for some laminate structures (polyolefins/polyesters, polyolefins/PPS etc.).

## **Typical Properties**

	<b>Test Method</b>	Unit	Typical Value
Glycidyl Methacrylate Content	FTIR (internal method)	%wt.	8
Melt Index (190°C/2.16kg)	ISO 1133 / ASTM D1238	g/10min.	5
Melting Point	ISO 11357-3 / D3418	°C	104
Vicat Softening Temperature	ISO 306 / ASTM D1525	°C	87
Flexural Modulus	ISO 178 / ASTM D790	MPa	85

### **Processing**

**H**eat stability of acrylate comonomer allows processing temperatures as high as for polyesters (PBT, PET) and PPS, which are the main material using **L**OTADER® AX8840 as impact modifier.

**CAUTION**: LOTADER® AX8840 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® AX8840.

### Storage, Handling & Safety

LOTADER® AX8840 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.

Safety data sheet as well as information on handling and storage of the LOTADER® AX8840 is available upon request to your SK functional polymer representative or on the web site 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.

The information above is believed to be accurate and represents the best information currently available to us. Your attention is directed to the pertinent Material Safety Data Sheets for the products mentioned herein. All sales are subject to SK Corporation's standard terms and conditions of sale, copies of which are available upon request and which are part of SK Functional Polymer invoices and/or order acknowledgments. Except as expressly provided in SK Corporation's standard terms and conditions of sale, SK Corporation makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and SK Corporation assumes no liability from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. SK Functional Polymer is a subsidiary of SK Global Chemical.