

Technical Data Sheet Date Prepared: March 2020

# **LOTADER® AX8840**

LOTADER® AX8840 is a random ethylene-glycidyl methacrylate copolymer.

- Glycidyl methacrylate provides 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.

Due to its reactivity induced by the glycidyl methacrylate, LOTADER® AX8840 can be used as a compatibiliser for polyesters/polyolefins blends and as 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            | °C                | 104           |
| Density  | ISO 1193 / ASTM D150   | g/cm <sup>3</sup> | 0.94          |
| Vicat Softening Temperature (10N) <sup>1</sup> | ISO 306 / ASTM D1525   | °C                | 87            |
| Flexural Modulus <sup>1</sup>                  | ISO 178 / ASTM D790    | MPa               | 85            |
| Elongation at Break <sup>1</sup>               | ISO 527-2 / ASTM D638  | %                 | 400           |
| Tensile Strength at Break <sup>1</sup>         | ISO 527-2 / ASTM D638  | MPa               | 8             |

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

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

#### **Processing**

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

**CAUTION**: LOTADER® AX8840 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® AX8840 should be stored in dry conditions and 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.

#### **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