

LOTADER[®] AX8840

Ethylene - Glycidyl Methacrylate copolymer

DESCRIPTION

LOTADER[®] AX8840 is a random copolymer of ethylene and glycidyl methacrylate, polymerized by high-pressure autoclave process.

- Glycidyl methacrylate gives reactivity (versus OH, COOH and NH₂ 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.

TYPICAL PROPERTIES

Characteristics	Value	Unit	Test Method
Glycidyl Methacrylate content	8	% Wt	FTIR (internal method)
Melt Index (190°C / 2.16 kg)	5	g/10min	ISO 1133 / ASTM D1238
Melting point	104	°C	ISO 11357-3
Density	0.94	g/cm ³	ISO 1183 / ASTM D1505
Vicat softening temperature (10N) ⁽¹⁾	87	°C	ISO 306 / ASTM D1525
Flexural modulus ⁽¹⁾	85	MPa	ISO 178 / ASTM D790
Elongation at break ⁽¹⁾	400	%	ISO 527-2 / ASTM D638
Tensile strength at break ⁽¹⁾	8	MPa	ISO 527-2 / ASTM D638
Hardness Shore D (at 1s) ⁽¹⁾	50		ISO 868 / ASTM D2240

⁽¹⁾ On compression molded samples.

APPLICATIONS

Due to its reactivity induced by the glycidyl methacrylate, LOTADER[®] AX8840 can be use as a compatibilizer for polyesters/polyolefins blends and as an adhesive for some laminate structures (polyolefins/polyesters, polyolefins/PPS etc.).

For more detailed information and recommendations regarding your specific application, please contact your local ARKEMA technical representative.

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PROCESSING

Heat stability of acrylate comonomer allows processing temperatures as high as for polyesters (PBT, PET) and PPS, which is the main material using **LOTADER® AX8840** as impact modifier or compatibilizer.

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 AND 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 ARKEMA representative or on the web site lotader.com.

SHELF LIFE

Two 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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