SK functional polymer

LOTADER® AX8840

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

- Glycidyl methacrylate gives reactivity (versus OH, COOH and NH_2 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.
- **L**OTADER® AX8840 exhibits good adhesion on PET, PBT, PPS, metal, paper, glass.

Due 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

	Test Method	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

Heat 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: **L**OTADER® 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 **L**OTADER® 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.