

LOTADER[®] AX8700

Reactive Ethylene - Butyl Acrylate - Glycidyl Methacrylate terpolymer

DESCRIPTION

Reactive random terpolymer of ethylene, butyl acrylate and glycidyl methacrylate (epoxide function) produced by high-pressure polymerization process.

- Reactivity with -OH, -COOH, -NH₂, -SH.
- Compatibility with PET, PBT, PPS, PE.
- Adhesion to metallic surface.
- Good thermal stability.

MAIN PROPERTIES

Characteristics	Typical Range	Unit	Test Method
Butyl acrylate content	23 - 28	% Wt	FTIR (internal method)
Glycidyl methacrylate content	6 - 9	% Wt	FTIR (internal method)
Melt Index (190°C / 2.16 kg)	7 - 11	g/10min	ISO 1133 / ASTM D1238
Glass transition temperature	-46	°C	ISO 11357-3
Melting point	71	°C	ISO 11357-3
Vicat softening temperature (10N) ⁽¹⁾	<40	°C	ISO 306 / ASTM D1525
Flexural modulus ⁽¹⁾	11	MPa	ISO 178 / ASTM D790
Tensile modulus ⁽¹⁾	9	MPa	ISO 527 / ASTM D638
Elongation at break ⁽¹⁾	860	%	ISO 527 / ASTM D638
Tensile strength at break ⁽¹⁾	4	MPa	ISO 527 / ASTM D638
Hardness Shore A/D ⁽¹⁾⁽²⁾	81/25		ISO 868 / ASTM D2240
Density	0.93	g/cm ³	ISO 1183 / ASTM D1505

⁽¹⁾ On compression molded samples. ⁽²⁾ Instantaneous

APPLICATIONS

- Impact modification of thermoplastic polyesters (PBT/PET/PC) and their alloys (e.g. PC/PBT).
- Impact modification, flexibilization and tie layer of polyphenylene sulfides (PPS).
- Compatibilizer for thermoplastic polyesters / polyolefins blends (PET/PO, PBT/PO).
- Adhesion promoter onto metallic surface.
- Bitumen performance enhancer.

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

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PROCESSING

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

CAUTION: LOTADER® AX (GMA grades) 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 extrusion.

STORAGE, HANDLING AND SAFETY

LOTADER® AX8700 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.

Due to its physical properties, it may be possible **LOTADER® AX8700** granules show some caking.

Safety data sheet as well as information on handling and storage 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 ARKEMA.

February 2018

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