

LOTADER[®] AX8700

PROVISIONAL TECHNICAL DATA SHEET

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.

LOTADER® AX8700

PROVISIONAL TECHNICAL DATA SHEET

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.

November 2016

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN.

The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement. See SDS for Health & Safety Considerations. Arkema has implemented a Medical Policy regarding the use of Arkema products in Medical Devices applications that are in contact with the body or circulating bodily fluids: <http://www.arkema.com/en/social-responsibility/responsible-product-management/medical-devicepolicy/index.html>

Arkema has designated Medical grades to be used for such Medical Device applications. Products that have not been designated as Medical grades are not authorized by Arkema for use in Medical Device applications that are in contact with the body or circulating bodily fluids. In addition, Arkema strictly prohibits the use of any Arkema products in Medical Device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days. The Arkema trademarks and the Arkema name shall not be used in conjunction with customers' medical devices, including without limitation, permanent or temporary implantable devices, and customers shall not represent to anyone else, that Arkema allows, endorses or permits the use of Arkema products in such medical devices. It is the sole responsibility of the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade Arkema products, in order to ensure that the final end-use product is safe for its end use; performs or functions as intended; and complies with all applicable legal and regulatory requirements (FDA or other national drug agencies) It is the sole responsibility of the manufacturer of the medical device to conduct all necessary tests and inspections and to evaluate the medical device under actual end-use requirements and to adequately advise and warn purchasers, users, and/or learned intermediaries (such as physicians) of pertinent risks and fulfill any postmarket surveillance obligations. Any decision regarding the appropriateness of a particular Arkema material in a particular medical device should be based on the judgment of the manufacturer, seller, the competent authority, and the treating physician.