

## Impact modifier for Engineering Resins

### Description

LOTADER<sup>®</sup> CX8902 comes from a unique technology based on the structure modification of functionalized polyolefins combining the very high efficiency of low Tg rubber with the inherent miscibility of functionalized copolymers.

### Main applications

Due to its properties (reactivity, softness), LOTADER<sup>®</sup> CX8902 is a toughener of choice designed to improve the impact strength of thermoplastic resins such as Polyesters (PBT, PET, PLA.) and Polyester blends (PBT/PET, PC/PET, PC/PBT, PC/PLA). LOTADER<sup>®</sup> CX8902 is recommended when optimal performance, such as energy to break at very low temperatures or high cost efficiency at room temperature, is needed.

### Typical characteristics

Characteristics	Value	Unit	Test Method
Melt index (190°C/21.6kg)	7-8	g/10mn	ASTM D 1238
Glycidyl Methacrylate content	4	% wt	FTIR (internal)

### Properties, benefits and use

- The low glass transition temperature (Tg) of LOTADER<sup>®</sup> CX8902 allows it to be used for demanding low temperature applications.
- Glycidyl methacrylate gives reactivity (versus OH, COOH groups), leading to optimal dispersion during melt mixing with Engineering Thermoplastics.
- LOTADER<sup>®</sup> CX8902 leads to 100% ductility for PBT at -40°C (and 100% ductility for CPET at -20°C) with 20% loading.
- LOTADER<sup>®</sup> CX8902 achieves never before reached performances at significant lower loading than with conventional modifier systems.
- Due to its strong compatibilizing efficiency, LOTADER<sup>®</sup> CX8902 induces optimal dispersion in PC/PET blends and allows excellent impact strength even at -30°C.

## Processing

- The heat stability of **LOTADER® CX8902** allows it to be processed at temperatures commonly used to process polyesters (PBT, PET, PLA) and polyester blends.
- **LOTADER® CX8902** is not corrosive.

### Warning

**LOTADER® CX8902 reacts with maleic anhydride and acid containing polymers. This reaction can be the cause of gels or can block an extruder if not controlled. Extruders must be purged thoroughly before and after extruding Lotader® CX8902.**

## Physical properties

Characteristics	Value	Unit	Test Method
Density (23°C)	1.01	g/cm <sup>3</sup>	ISO 1183
Melting point	65 (140)	°C (°F)	DSC
Vicat softening point (1 kg)	< 40 (< 104)	°C (°F)	ASTM D 1525 / ISO 306

## Packaging

**LOTADER® CX8902**, available in pellet form, is commonly packed in 20 kg bags. During storage, the material must be kept out of moisture in an aerated building at temperature lower than 45°C (112°F).

## Security / Precautions of use

A safety data sheet, as well as information on handling and storage of **LOTADER® CX8902**, is available from any ARKEMA representative or on our website [www.arkema.com](http://www.arkema.com) under the heading FDS.

March 2010

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