TECHNICAL DATA SHEET

Clearstrength® E980

MBS Toughening Agent for Thermosetting Resins

PRODUCT DESCRIPTION

Clearstrength® E980 is a new methyl methacrylate butadienestyrene (MBS) core-shell toughening agent designed to impart excellent ambient and cold temperature toughness to thermosetting resins. Clearstrength® E980 toughening agent is produced using a proprietary technology resulting in better dispersion capability in liquid monomers like (meth)acrylics, epoxies and polyesters.

TYPICAL PHYSICAL PROPERTIES*

Physical Form	White Powder	
Specific Gravity	1.02	
Bulk Density	0.3 g/cc	
Particle Size	3% Max on 850 μm	
Percent Volatiles	1.0% Max	

^{*}Typical properties not to be construed as specifications

SUGGESTIONS FOR USE

Clearstrength® E980 toughening agent is recommended for use in (meth)acrylic and epoxy systems to increase the toughness in various thermosetting applications such as structural adhesives (e.g. EV automotive, B&C, Wind, etc.), composites (e.g. sporting goods, automotive, CCL, etc.), and resins (potting, insulating, etc.).

The loading concentration depending on requirement is generally from 1 to 20 wt%. End users should evaluate Clearstrength® E980 toughening agent in their own laboratories to establish optimum conditions for use in their process and applications. Arkema's Technical Service Team is available to discuss your application requirements, provide formulations guidance and laboratory testing as needed.

PACKAGING

Clearstrength® E980 toughening agent is packaged in 14 kg bags (350 kg per pallet).

PRODUCT BENEFITS

Good dispersion

Clearstrength® E980 toughening agent provides improved dispersion capability, allowing lower mixing time than similar general purpose MBS core shell powder.

Enhanced mechanical properties

Clearstrength® E980 provides improved performance to various thermosetting resins, like ductility, room temperature and low temperature lap shear strength, impact strength, crack propagation resistance, and thermal shock resistance. The use of Clearstrength® E980 does not decrease the glass transition temperature of the final systems.

Plastic Additives	CLEARSTRENGTH® E950 General Purpose MBS	CLEARSTRENGTH® E980	CLEARSTRENGTH® XT100
Dispersion Process	•	••	•••
Ductility / Elongation	••	••	•••
Lap Shear Adhesion	••	•••	•••
K1C / Crack Propagation		••	•••
Shear & Temperature Process Optimization	Reference	Low to medium decrease	Medium to high decrease

- Standard
- •• Optimized
- ••• Best in class



ENVIRONMENTAL AND SAFETY INFORMATION

Before handling this material, read and understand the Safety Data Sheet (SDS) for additional information. The SDS is available on our website www.arkema.com or upon request at our Customer Service Department. Arkema believes strongly in Responsible Care® as a public commitment.

MORE TECHNICAL INFORMATION AVAILABLE

Ask your Arkema account manager for further information on high quality Arkema additives for use in PVC, PC, PBT, ABS, PLA, epoxies, (meth)-acrylics, and other thermoplastic or thermosetting systems. Arkema produces a full line of impact modifiers and processing aids. In addition, Arkema's Technical Service staff is also available to assist compounders and processors with formulation and processing recommendations.

Durastrength® Impact Modifiers

Durastrength® acrylic impact modifiers deliver outstanding impact characteristics for outdoor durable applications in PVC, engineering resins and thermosets.

Plastistrength® Process Aids

Plastistrength® process aids offer producers a complete line of melt strengtheners and metal release agents for PVC and engineering resins. Plastistrength® process aids can improve fusion, surging, and aesthetics.

Clearstrength® Impact Modifiers

Clearstrength® impact modifiers are designed for extreme impact or impact/clarity combination in PVC and engineering resins. Clearstrength® impact modifiers provide superior toughening effect in thermosetting resins.

Biostrength® Additives

Biostrength® impact modifiers are designed to improve properties and enhance processability of polylactic acid (PLA) and other biopolymer compounds.

FOR MORE INFORMATION CONTACT

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