CLEARSTRENGTH®

TDS/TECHNICAL DATA SHEET

Clearstrength® E920
MBS Impact Modifier for Engineering Resins

PRODUCT DESCRIPTION

Clearstrength® E920 is a methylmethacrylate-butadiene-styrene (MBS) core-shell impact modifier designed to impart excellent ambient and low temperature toughness to engineering polymers.

Clearstrength® E920 impact modifier is aimed to provide maximum impact to polycarbonate, polyesters and a variety of polycarbonate blends, particularly PC/ABS.

TYPICAL PHYSICAL PROPERTIES

Physical Form	White Powder
Specific Gravity	1.02
Bulk Density	0.39 g/cc
Particle Size	2% Max on 850 µm
Percent Volatiles	1.0% Max

Clearstrength® E920 is also available in pellet form.

Please refer to Clearstrength® E922 technical data sheet for more information.

PRODUCT BENEFITS

Property		Neat PC	PC + 5 % Clearstrength® E920 IM
MVR, 280°C, 1.2 kg		25	21
Modulus (MPa)		2200	2200
Impact Energy* (kJ/m²)	23°C	15	48
	-10°C	ND**	43
	-20°C	ND**	40

ISO 1133:2011 for MVR, Melt Volume-flow Rate
*ISO 180:2000 type 1eA specifications for notched Izod impact tests.
**Not Determined

Property		Neat PC/ABS (65/35)	PC/ABS + 5 % Clearstrength® E920 IM
Impact Energy* (kJ/m²)	-20°C	8	25

*ISO 180:2000 specifications for notched Izod impact tests.

PRODUCT BENEFITS

Superior Low Temperature Impact

Clearstrength® E920 impact modifier allows to create products that can withstand impact at < -40°C and still remain ductile.

Good Dispersion

Clearstrength® E920 impact modifier is easily dispersed using conventional compounding techniques. The resulting engineering plastic compound flows readily into molding equipment and final product has exceptional impact strength and appearance.

Balanced Property Control

Clearstrength® E920 impact modifier permits low-temperature impact retention of low-viscosity resins while minimizing its influence on other physical and mechanical properties.

SUGGESTIONS FOR USE

Clearstrength® E920 impact modifier is recommended for use in automotive applications, electrical/electronic components and all PC and PC/ABS parts where ease of processing, thermal stability, excellent low temperature impact and good balance of physical properties are important.

Recommended loading levels depend on impact requirement. Typical levels range from 5 to 15%. Prospective clients should evaluate Clearstrength® E920 impact modifier 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® E920 impact modifier is packaged in 20 kg bags (500 kg per pallet) and 500 kg bulk bags (1000 kg per pallet).

ENVIRONMENTAL AND SAFETY INFORMATION

Before handling this material, read and understand the MSDS (Material Safety Data Sheet) / SDS (Safety Data Sheet) for additional information on safety, health and environmental information. The MSDS/SDS are 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 Epoxy, (meth)-acrylic and other polymer 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 advice.

Durastrength® Impact Modifiers
Durastrength® acrylic impact modifiers deliver outstanding impact characteristics for outdoor durable applications in PVC and Engineering Resins.

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
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 epoxy and (meth)-acrylic resins.

Biostrength® Additives
Biostrength® product line of impact modifiers, melt strengtheners and metal release agents are designed to improve properties and enhance processability of polylactic acid (PLA) and other biopolymers compounds.

FOR MORE INFORMATION CONTACT

Please contact your local account manager or our headquarters:

In Europe
ARKEMA
Arkema Coating Resins
420 Rue d'Estienne d'Orves
92705 COLOMBES Cedex, France
Tel: +33 (0) 149 008 080
plasticadditives.arkema.com/en/contact/

In US
Arkema Inc.
Coating Resins
410 Gregson DrCary, NC 27511
Tel: +1 (877) 331-6696
plasticadditives.arkema.com/en/contact/

In Asia
Arkema Pte Ltd.
10, Science Park Road, #01-01A,
The Alpha Singapore Science Park II,
Singapore 117684
Tel: +65 6419 9199
plasticadditives.arkema.com/en/contact/

Don't hesitate to visit **plasticadditives.arkema.com**

ASK QUESTIONS TO OUR EXPERTS

LIBRARY DOCS WEBINARS

WEB SERVICES TDS SAMPLING

PRODUCT SELECTORS BROCHURES

Please consult Arkema's disclaimer regarding the use of our products on http://www.arkema.com/en/products/product-safety/disclaimer/ (2022/06/23)

ARKEMA