



Clearstrength[®] E-922

MBS Impact Modifier for Engineering Resins

PRODUCT DESCRIPTION

Clearstrength[®] E-922 is a methacrylate-butadiene-styrene (MBS) core-shell impact modifier designed to impart excellent ambient and low temperature toughness to engineering polymers.

Clearstrength[®] E-922 impact modifier is aimed to formulate polycarbonate, polyesters and a variety of polycarbonate blends, particularly PC/ABS, for maximum impact.

TYPICAL PHYSICAL PROPERTIES

Physical Form	Pellet
Specific Gravity	1.02
Percent Volatiles	1.0% max by weight

Clearstrength[®] E-922 is the pellet form of Clearstrength[®] E-920 impact modifier. Please refer to the Clearstrength[®] E-920 technical data sheet for more information on the powder.

SUGGESTIONS FOR USE

Clearstrength[®] E-922 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[®] E-922 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[®] E-922 impact modifier is packaged in 20 kg bags (500 kg per pallet).

PRODUCT BENEFITS

Superior Low Temperature Impact

Clearstrength[®] E-922 impact modifier allows to create products that can withstand impact at <-40°C and still remain ductile.

Good Dispersion

Clearstrength[®] E-922 impact modifier is easily dispersed using conventional compounding techniques. The resulting engineering plastic compounds flow readily in moulding equipment and have exceptional impact strength and appearance.

Balanced Property Control

Clearstrength[®] E-922 impact modifier permits low-temperature impact retention of low-viscosity resins while minimizing its influence on other physical and mechanical properties.

Property		Neat PC	PC + 5 % Clearstrength [®] E-922 IM
MVR, 280°C, 1.2 kg		25	21
Modulus (MPa)		2200	2200
Impact Energy* (kJ/m ²)	23°C	15	48
	-10°C	ND**	43
	-20°C	ND**	40

ISO 1133:2011 specifications 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 [®] E-922 IM
Impact Energy* (kJ/m ²)	-20°C	8	25

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

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 at +1(800) 331 7654 in the US, and at +33 (0)1 4900 8837 in Europe. 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 and other polymer systems. Arkema produces a full line of impact modifiers, processing aids and epoxidized vegetable oils. 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 Modifiers

Clearstrength® MBS impact modifiers are designed for extreme impact or impact/clarity combination in PVC and Engineering Resins.

Biostrength® Additives

The 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.

Vikoflex® Epoxy Plasticizers

The Vikoflex® line of epoxy plasticizers is derived from renewable resources, like epoxidized linseed oil, soybean and tall oil fatty acid esters for applications such as PVC plasticization, acid and mercaptan scavenging, specialty coatings, adhesives & urethanes, reactive diluents, PU flexible foam and intermediates for surfactants and lube & fuel additives.

FOR MORE INFORMATION CONTACT

Please contact your local account manager or our headquarters:

In Europe:

ARKEMA

Functional Additives

420 Rue d'Estienne d'Orves

92705 COLOMBES Cedex, France

Tel: +33 (0)1 4900 8837

functionaladditives.internet@arkema.com

(email)

In US:

Arkema Inc.

Functional Additives Customer Service

900 First Avenue, King of Prussia, PA

19406-1308

Tel: +1 (800) 331 7654

Fax: +1 (800) 205 7064

arkema.usph-facts@arkema.com (e-mail)

In Asia:

Arkema Pte Ltd.

10, Science Park Road, #01-01A, The Alpha

Singapore Science Park II, Singapore 117684

Tel: +65 6419 9199

functionaladditives.internet@arkema.com

(email)

VISIT US AT OUR WEBSITE

www.additives-arkema.com

IMPORTANT: 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, EXPRESS 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.

© 2014 Arkema Inc. All rights reserved.

Clearstrength® and Plastistrength® are registered trademarks of Arkema

Biostrength® and Durastrength® are registered trademarks of Arkema Inc.

Vikoflex® is a registered trademark of Viking Chemical Company

Responsible Care® is a registered trademark of the American Chemistry Council Inc.