DURASTRENGTH®

TDS/TECHNICAL DATA SHEET

Durastrength® 440
Acrylic Impact Modifier

PRODUCT DESCRIPTION

Durastrength® 440 impact modifier is based on novel acrylic chemistry designed to impart excellent ambient and cold temperature impact to PC and PC blends.

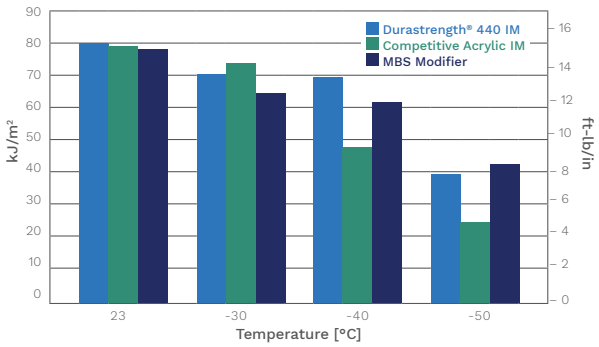
TYPICAL PHYSICAL PROPERTIES

Physical Form	White Powder
Specific Gravity	1.09
Bulk Density	0.50 g/cc
Particle Size	2% Max on 50 Mesh
Percent Volatiles	1.0% Max

PRODUCT BENEFITS

1. The low Tg core of the Durastrength® 440 impact modifier enables it to be used in applications typically reserved for MBS modifiers. For demanding low temperature applications, it can be used to create products that can withstand -40°C and still remain ductile.

Impact Performance of Durastrength® 440 IM in Polycarbonate



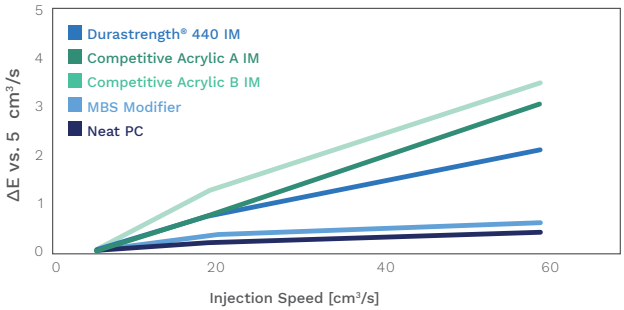
ASTM Da256 specifications for notched Izod.
Formulation is 5% impact modifier in a 12 MFR polycarbonate.

2. Durastrength® 440 all-acrylic impact modifier provides the excellent weatherability for which acrylics are known, opening the door for use in applications that demand retention of color and mechanical properties upon exposure to the elements.

PRODUCT BENEFITS

3. The properties of Durastrength® 440 impact modifier have been optimized to provide a readily dispersed modifier that has a minimal impact on the color of molded parts. Conventional acrylics can give a faded appearance and inhomogeneous mold-in color. Durastrength® 440 impact modifier overcomes these deficiencies permitting the use of acrylic modifiers in the molding of high-viscosity resins into thin-walled geometries.

Color Stability of Durastrength® 440 IM During High-Speed Injection Molding



Formulation contained 5% impact modifier and 0.5% blue pigment in an 11 MFR polycarbonate. Molded at 300°C through a 2 mm x 6 mm gate.

4. Durastrength® 440 impact modifier has minimal effect on other polymer properties.

SUGGESTIONS FOR USE

Durastrength® 440 impact modifier is recommended for use in PC and PC blends where superior low temperature impact and weatherability are required.

Durastrength® 440 impact modifier is targeted for use in automotive applications, lawn and garden equipment, and recreational vehicles where weatherability and good low temperature impact are important.

Prospective clients should evaluate Durastrength® 440 impact modifier in their own laboratories to establish optimum conditions in their processes and applications. Arkema's Technical Service Team is available to discuss your application requirements provide formulation guidance and laboratory testing as needed.

PACKAGING

Durastrength® 440 impact modifier is packaged in 25 kg bags and 1,000 lb bulk bags.

ARKEMA

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

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