

Durastrength® 527

Multifunctional Acrylic Impact Modifier

PRODUCT DESCRIPTION

Durastrength® 527 is a high performance, highly efficient impact modifier designed for use in window profiles, capstock solutions, and other weatherable vinyl applications. Durastrength® 527 enables a broad processing window and best-in-class impact strength based on efficiency.

TYPICAL PHYSICAL PROPERTIES*

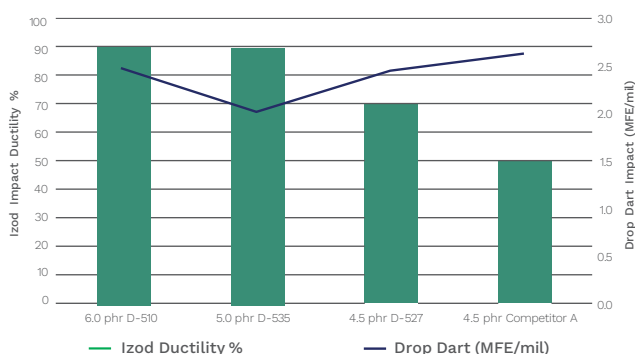
Physical Form	White Powder
Specific Gravity	1.1
Bulk Density	0.48 gm/cc
Particle Size	15% Max on 50 Mesh
Percent Volatiles	1.2% Max

*Typical properties not to be construed as specifications

PRODUCT BENEFITS

1. Durastrength® 527 delivers industry-standard impact/mechanical strength at significantly lower loading levels (see Figure 1) compared to other Durastrength® impact modifiers or a typical competitive product.

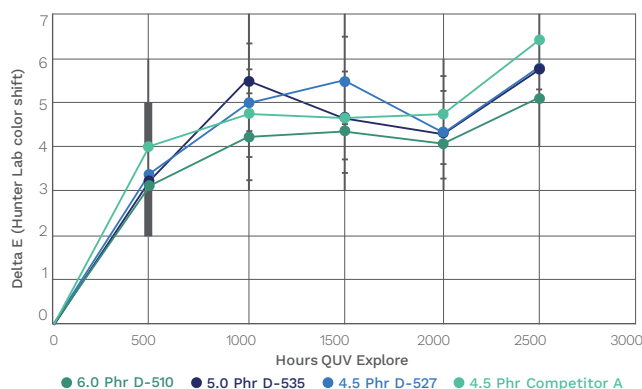
Impact Modifier Mechanical Performance



2. Formulations incorporating Durastrength® 527 impact modifier meet or exceed industry standards for weathering performance. Figure 2 details QUV data comparing Durastrength® 527 to other Durastrength® impact modifiers as well as a typical competitive product. Performance is consistent across all technologies and rubber content.

PRODUCT BENEFITS

QUV Weathering Data (2500 Hours)



3. Durastrength® 527 impact modifier offers rheology behavior that meets industry standards. Figure 3 on the following page shows no significant differences in fusion time or torque for Durastrength® 527 in a weatherable profile formulation compared to other Durastrength® impact modifiers or a typical competitive product.

PRODUCT BENEFITS

Brabender Rheology Expanded Fusion and Thermal Stability

		170°C / 75 RPM / 65 g		190°C / 75 RPM / 65 g			
Additive	PHR	Fusion Time (sec)	Fusion Torque (m g)	Fusion Time (sec)	Fusion Torque (m g)	Eq. Torque (m g)	Stability Time (min)
Durastrength® 510	6.0	46	4364	30	3810	1723	8.4
Durastrength® 535	5.0	44	3997	22	3616	1757	7.6
Durastrength® 527	4.5	48	3881	30	3638	1723	8.4
Competitor A	4.5	44	3870	26	3645	1662	7.7

TYPICAL FORMULATION
RECOMMENDATION

Component	PHR
PVC (K=67)	100
19% methyl Sn Stabilizer	1.0
Calcium Stearate	1.2
Paraffin Wax (165°F mp)	1.0
Oxidized PE Wax	0.1
Durastrength® 527 Impact Modifier	5.0
CaCO ₃	3.0
TiO ₂	10.0
Total	121.3

PACKAGING

Durastrength® 527 is packaged in 25 kg small bags (40 bags per pallet), 816 kg big bags and 453 kg big bags.

ENVIRONMENTAL AND SAFETY INFORMATION

Before handling this material, read and understand the Safety Data Sheet (SDS) for additional information on handling, storage, and disposal of the product to ensure the health of users, the safety of facilities, and the protection of the environment. 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.

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

Please contact your local account manager, our headquarters, or our R&D centers:

Global Headquarters

Arkema
Arkema Coating Resins
LIGHTWELL Building
51 Esplanade du Général de Gaulle
CS 10478 - 92907 Paris La Défense cedex
France
Tel: +33 (0)1 49 00 80 80
plasticadditives.arkema.com/en/contact/

US Headquarters

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

US R&D Center

Arkema Inc.
900 1st Avenue
King of Prussia, PA 19406
Tel: +1 (610) 878-6500
plasticadditives.arkema.com/en/contact/

Visit
plastic.additives.arkema.com



ASK QUESTIONS
TO OUR EXPERTS



LIBRARY
DOCUMENTS
WEBINARS



WEB SERVICES
TDS
SAMPLING



INTERACTIVE
PRODUCT FINDERS
& BROCHURES

Plastistrength® is a registered trademark of Arkema. Biostrength® and Durastrength® are registered trademarks of Arkema Inc. Responsible Care® is a registered trademark of the American Chemistry Council Inc. 2026 Arkema Inc. All rights reserved.

Please consult Arkema's disclaimer regarding the use of our products on
<http://www.arkema.com/en/products/product-safety/disclaimer/>

plasticadditives.arkema.com

ARKEMA