

# DURASTRENGTH®

TDS/TECHNICAL DATA SHEET

## Durastrength® 350 Acrylic Impact Modifier

### PRODUCT DESCRIPTION

Durastrength® 350 impact modifier is a high performance acrylic impact modifier that imparts superior impact properties to rigid vinyl products. It was designed to give the impact resistance necessary to pass critical impact test procedures, while maintaining the excellent weatherability, processability and flow properties of Durastrength® 200 impact modifier.

### TYPICAL PHYSICAL PROPERTIES

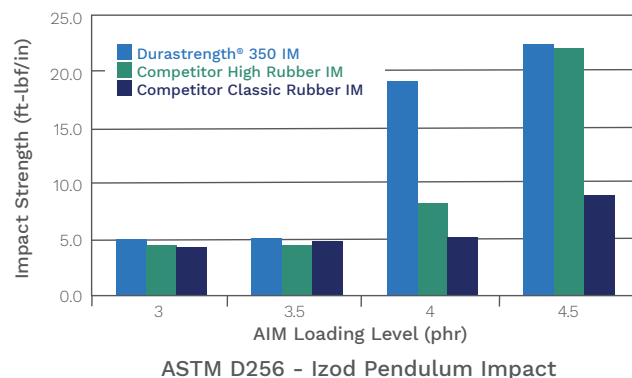
Physical Form	White Powder
Specific Gravity	1.1
Bulk Density	0.45 g/cc
Particle Size	15% Max on 50 Mesh
Percent Volatiles	1.2% Max

### PRODUCT BENEFITS

Because it was developed with the customer in mind, Durastrength® 350 brings a wealth of benefits to compounders and manufacturers such as:

1. Durastrength® 350 impact modifier provides superior long-term weather resistance while retaining impact resistance and color retention.
2. Durastrength® 350 impact modifier imparts excellent room temperature impact resistance while maintaining industry required low-temperature impact resistance.

### Izod Impact (Window Profile Formulation)

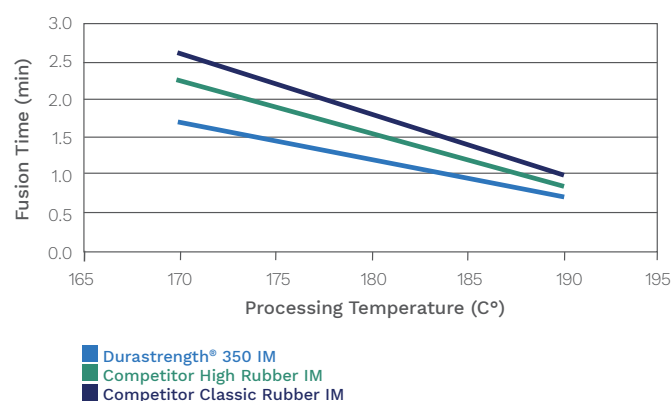


### PRODUCT BENEFITS

3. Durastrength® 350 impact modifier provides a broad process window allowing flexibility in processing temperature and output.

4. Durastrength® 350 impact modifier offers faster fusion over competitive acrylic impact modifiers without the need for additional process aids.

### Fusion Time Versus Processing Temperature



### SUGGESTIONS FOR USE

Durastrength® 350 impact modifier is ideally suited for vinyl window profile, siding, fencing, decking, pipe, and conduit. The low melt viscosity and rapid fusion characteristics of Durastrength® 350 impact modifier are also ideal for difficult injection molding applications.

Durastrength® 350 impact modifier is recommended for use in tin, lead, and mixed-metal stabilized profile applications where enhanced room and cold-temperature impact resistance is required. As with all impact modifiers for PVC, proper formulation is required to develop the proper shear and mixing during extrusion so that impact properties are optimized.

Prospective customers should evaluate Durastrength® 350 impact modifier in their own laboratories to establish optimum conditions for use 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.

## STARTING FORMULATION RECOMMENDATIONS

### Window Profile

PVC Resin (K-65 to K-67)	100.0 phr
Methyl Organotin Stabilizer	1.0 – 1.5
Calcium Stearate	1.0 – 1.5
Paraffin/Ester Lubricant	0.8 – 1.5
Oxidized Polyethylene	0.0 – 0.2
Durastrength® 350 Impact Modifier	4.25 – 5.25
Plastistrength® 530 / 550 Process Aid	0.3 – 1.0
Plastistrength® 770 Process Aid	0.2 – 0.5
Calcium Carbonate (0.7µm)	3.0 – 8.0
Titanium Dioxide	9.0 – 10.0

### Custom Injection Molding

PVC Resin (K-55)	100.0 phr
Butyl Organotin Stabilizer	2.0 – 2.5
Paraffin Wax (165°F mp)	1.0 – 1.5
Calcium Stearate	1.5 – 2.0
Durastrength® 350 Impact Modifier	6.5 – 10.0
Plastistrength® 550 Process Aid	1.5 – 2.0
Plastistrength® 770 Process Aid	0.5 – 1.0
Calcium Carbonate (0.8µm)	0.0 – 5.0
Titanium Dioxide	2.0 – 5.0

## PACKAGING

Durastrength® 350 impact modifier is packaged in 22,7 kg small bags (50 bags per pallet) and big bag 816 kg.

## 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](http://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:

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