

Delrin® 127UV BK701

ACETAL RESIN

DuPont Performance Polymers

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

UV Stabilized High Viscosity Acetal Homopolymer

General

Material Status	• Commercial: Active
Literature ¹	• Processing - Injection Molding (English) • Typical Processing for DuPont Engineering Polymers (English) • White Paper - Property Advantages of Delrin® Acetal Homopolymer - a guide for design engineers (English)
UL Yellow Card ²	• E41938-257622 • E41938-101541287
Search for UL Yellow Card	• DuPont Performance Polymers • Delrin®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Additive	• Lubricant • Mold Release • UV Stabilizer
Features	• High Viscosity • Homopolymer • UV Stabilized
RoHS Compliance	• Contact Manufacturer
Forms	• Pellets
Processing Method	• Extrusion • Injection Molding • Profile Extrusion • Sheet Extrusion
Part Marking Code (ISO 11469)	• POM
Resin ID (ISO 1043)	• POM

Physical	Nominal Value Unit	Test Method
Density	1.42 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.5 g/10 min	ISO 1133

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	3000 MPa	ISO 527-2
Tensile Stress (Yield)	71.5 MPa	ISO 527-2
Tensile Strain (Yield)	22 %	ISO 527-2
Nominal Tensile Strain at Break	37 %	ISO 527-2
Flexural Modulus	2800 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	10 kJ/m ²	
23°C	13 kJ/m ²	

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	162 °C	ISO 75-2/B
1.8 MPa, Unannealed	92.0 °C	ISO 75-2/A
Melting Temperature ⁴	178 °C	ISO 11357-3
CLTE		ISO 11359-2
Flow	1.1E-4 cm/cm/°C	
Transverse	1.1E-4 cm/cm/°C	
Annealing Temperature	160 °C	
Annealing Time - Optional	30.0 min/mm	

Flammability	Nominal Value Unit	Test Method
Burning Rate ⁵ (1.00 mm)	26 mm/min	ISO 3795
Flame Rating (0.8 mm)	HB	UL 94 IEC 60695-11-10, -20
FMVSS Flammability	B	FMVSS 302



Additional Information	Nominal Value Unit	Test Method
Emission	< 8.00 mg/kg	VDA 275
Weather Stability delta E grey scale	0.400 4.00 to 5.00	DIN 53236 ISO 105-A02

Injection	Nominal Value Unit
Drying Temperature	80 °C
Drying Time - Desiccant Dryer	2.0 to 4.0 hr
Suggested Max Moisture	0.20 %
Processing (Melt) Temp	210 to 220 °C
Melt Temperature, Optimum	215 °C
Mold Temperature	80 to 100 °C
Mold Temperature, Optimum	90 °C
Holding Pressure	90.0 to 110 MPa
Drying Recommended	yes
Hold Pressure Time	8.00 s/mm

Extrusion	Nominal Value Unit
Drying Temperature	75 to 85 °C
Drying Time	2.0 to 4.0 hr
Suggested Max Moisture	0.20 %
Melt Temperature	195 to 205 °C
Extrusion Melt Temperature, Optimum	200 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 10°C/min

⁵ FMVSS 302



Where to Buy

Supplier

DuPont Performance Polymers

Wilmington, DE USA
Telephone: 302-999-4592
Web: <http://plastics.dupont.com/>

Distributor

Biesterfeld Plastic GmbH

Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.

Telephone: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

Availability: Algeria, Austria, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey

CCC Plastics

Telephone: 800-465-6917

Web: <http://www.cccplastics.com/>

Availability: Canada

Distrupol Ltd

Distrupol Ltd is a Pan European distribution company. Contact Distrupol Ltd for availability of individual products by country.

Telephone: 08452003040

Web: <http://www.distrupol.com/>

Availability: Denmark, Finland, Ireland, Norway, Sweden, United Kingdom

PolyOne Distribution

PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.

Telephone: 800-894-4266

Web: <http://polyonedistribution.com/>

Availability: Global

