

Delrin® 570 NC000

ACETAL RESIN

DuPont Performance Polymers

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

20% Glass Filled Medium Viscosity Acetal Homopolymer

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Mold Release
Features	• Homopolymer • Medium Viscosity
RoHS Compliance	• Contact Manufacturer
Forms	• Pellets
Processing Method	• Injection Molding
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1) • Secant Modulus vs. Strain (ISO 11403-1) • Shear Stress vs. Shear Rate (ISO 11403-1) • Specific Volume vs Temperature (ISO 11403-2) • Viscosity vs. Shear Rate (ISO 11403-2)
Part Marking Code (ISO 11469)	• POM-GF20
Resin ID (ISO 1043)	• POM-GF20

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.56 g/cm ³	1.56 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	0.427 in ³ /10min	7.00 cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.2 %	1.2 %	
Flow	1.8 %	1.8 %	
Water Absorption			ISO 62
Saturation, 73°F (23°C), 0.0787 in (2.00 mm)	0.80 %	0.80 %	
Equilibrium, 73°F (23°C), 0.0787 in (2.00 mm), 50% RH	0.10 %	0.10 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	711000 psi	4900 MPa	ISO 527-2
Tensile Stress (Break)	7690 psi	53.0 MPa	ISO 527-2
Tensile Strain (Break)	12 %	12 %	ISO 527-2
Flexural Modulus	667000 psi	4600 MPa	ISO 178
Poisson's Ratio	0.35	0.35	ISO 527

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.4 ft·lb/in ²	3.0 kJ/m ²	
73°F (23°C)	1.7 ft·lb/in ²	3.5 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	24 ft·lb/in ²	50 kJ/m ²	
73°F (23°C)	26 ft·lb/in ²	54 kJ/m ²	
Notched Izod Impact Strength (73°F (23°C))	2.9 ft·lb/in ²	6.0 kJ/m ²	ISO 180/1A

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 961/30)	23200 psi	160 MPa	ISO 2039-1



Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	329 °F	165 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	257 °F	125 °C	ISO 75-2/A
Vicat Softening Temperature	320 °F	160 °C	ISO 306/B50
Melting Temperature ²	352 °F	178 °C	ISO 11357-3
CLTE			ISO 11359-2
Flow	3.3E-5 in/in/°F	6.0E-5 cm/cm/°C	
Transverse	4.7E-5 in/in/°F	8.5E-5 cm/cm/°C	
Annealing Temperature	320 °F	160 °C	
Annealing Time - Optional	30.0 min/mm	30.0 min/mm	
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 62631-3-2
Volume Resistivity	1.0E+13 ohms·m	1.0E+13 ohms·m	IEC 62631-3-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.90	3.90	
1 MHz	3.90	3.90	
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate ³ (0.0394 in (1.00 mm))	2.1 in/min	53 mm/min	ISO 3795
Flame Rating			UL 94
0.06 in (1.5 mm)	HB	HB	IEC 60695-11-10, -20
0.12 in (3.0 mm)	HB	HB	
FMVSS Flammability	B	B	FMVSS 302
Fogging - G-value (condensate)	5.0E-4 g	5.0E-4 g	ISO 6452
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Emission	< 8.00 mg/kg	< 8.00 mg/kg	VDA 275
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	176 °F	80 °C	
Drying Time - Desiccant Dryer	2.0 to 4.0 hr	2.0 to 4.0 hr	
Suggested Max Moisture	0.20 %	0.20 %	
Processing (Melt) Temp	410 to 428 °F	210 to 220 °C	
Melt Temperature, Optimum	419 °F	215 °C	
Mold Temperature	176 to 212 °F	80 to 100 °C	
Mold Temperature, Optimum	194 °F	90 °C	
Holding Pressure	11600 to 14500 psi	80.0 to 100 MPa	
Drying Recommended	yes	yes	
Hold Pressure Time	8.00 s/mm	8.00 s/mm	

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

³ 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

Reseller

A Reseller is not a distributor authorized by the Supplier.

Shanghai Jingyang New Material Technology Co., Ltd
Telephone: +86-021-80394788; Mr. Zhou: +86-15821998203
Web: <http://www.basfppsu.com/>
Availability: Asia Pacific, China

