

DuPont Performance Polymers Delrin® 900P BK602 Acetal Homopolymer (Unverified Data**)

Category : Polymer , Thermoplastic , Acetal (POM)

Material Notes:

Delrin® 900P BK602 is a low viscosity black acetal homopolymer resin for multicavity and thin wall molding. It offers an improved processing thermal stability. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Delrin-900P-BK602-Acetal-Homopolymer-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.42 g/cc	0.0513 lb/in ³	ISO 1183
Linear Mold Shrinkage, Flow	0.018 cm/cm @Thickness 2.00 mm	0.018 in/in @Thickness 0.0787 in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.017 cm/cm @Thickness 2.00 mm	0.017 in/in @Thickness 0.0787 in	ISO 294-4
Melt Flow	25 g/10 min @Load 2.16 kg, Temperature 190 °C	25 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	70.0 MPa @Temperature 23.0 °C	10200 psi @Temperature 73.4 °F	ISO 527
Elongation at Break	17 % @Temperature 23.0 °C	17 % @Temperature 73.4 °F	nominal; ISO 527
	22 % @Temperature 23.0 °C	22 % @Temperature 73.4 °F	ISO 527
Elongation at Yield	12 % @Temperature 23.0 °C	12 % @Temperature 73.4 °F	ISO 527
Tensile Modulus	3.30 GPa @Temperature 23.0 °C	479 ksi @Temperature 73.4 °F	ISO 527
Flexural Modulus	3.00 GPa @Temperature 23.0 °C	435 ksi @Temperature 73.4 °F	ISO 178
Izod Impact, Notched (ISO)	7.00 kJ/m ²	3.33 ft-lb/in ²	ISO 180/1A

Mechanical Properties	@Temperature -40.0 °C Metric	@Temperature -40.0 °F English	Comments
	7.00 kJ/m ²	3.33 ft-lb/in ²	ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	13.0 J/cm ²	61.9 ft-lb/in ²	ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	0.700 J/cm ²	3.33 ft-lb/in ²	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.800 J/cm ²	3.81 ft-lb/in ²	ISO 179/1eA
	@Temperature -40.0 °C	@Temperature -40.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	500 µm/m-°C	278 µin/in-°F	ISO 11359-1/-2
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	
	500 µm/m-°C	278 µin/in-°F	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	ISO 11359-1/-2
	500 µm/m-°C	278 µin/in-°F	ISO 11359-1/-2
	@Temperature 55.0 - 100 °C	@Temperature 131 - 212 °F	
CTE, linear, Transverse to Flow	90.0 µm/m-°C	50.0 µin/in-°F	
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	ISO 11359-1/-2
	100 µm/m-°C	55.6 µin/in-°F	ISO 11359-1/-2
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
	130 µm/m-°C	72.2 µin/in-°F	
	@Temperature 55.0 - 100 °C	@Temperature 131 - 212 °F	ISO 11359-1/-2
Melting Point	178 °C	352 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	161 °C	322 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	98.0 °C	208 °F	ISO 75-1/-2

Thermal Properties	Metric	English	Comments
UL RTI, Electrical	@Thickness 0.750 mm	@Thickness 0.0295 in	UL 746B
	110 °C	230 °F	UL 746B
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	110 °C	230 °F	UL 746B
	@Thickness 3.00 mm	@Thickness 0.118 in	
UL RTI, Mechanical with Impact	50.0 °C	122 °F	UL 746B
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	85.0 °C	185 °F	UL 746B
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	90.0 °C	194 °F	UL 746B
	@Thickness 3.00 mm	@Thickness 0.118 in	
UL RTI, Mechanical without Impact	50.0 °C	122 °F	UL 746B
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	90.0 °C	194 °F	UL 746B
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	95.0 °C	203 °F	UL 746B
	@Thickness 3.00 mm	@Thickness 0.118 in	
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	HB	HB	IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	IEC 60695-11-10
	@Thickness 3.00 mm	@Thickness 0.118 in	
	HB	HB	UL94
	@Thickness 3.00 mm	@Thickness 0.118 in	
	HB	HB	UL94
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	UL94
	@Thickness 0.750 mm	@Thickness 0.0295 in	

Processing Properties	Metric	English	Comments
Melt Temperature	215 °C	419 °F	Optimum; Injection Molding
	210 - 220 °C	410 - 428 °F	Injection Molding
Mold Temperature	90.0 °C	194 °F	optimum; Injection Molding
	80.0 - 100 °C	176 - 212 °F	Injection Molding
Drying Temperature	80.0 °C	176 °F	Injection Molding
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	Injection Molding
Moisture Content	<= 0.20 %	<= 0.20 %	Injection Molding

Descriptive Properties	Value	Comments
Appearance	Black Color	
Drying Recommended	Not normally required unless moisture content of resin exceeds recommended level	
Features	Creep Resistance, Good	
	Dimensional Stability, Good	
	Fatigue Resistant	
	Homopolymer	
	Stiffness, High	
	Strength, High	
	Viscosity, Low	
Forms	Pellets	
Generic	Acetal (POM) Homopolymer	
Material Status	Current	
Part Marking Code	>POM<	ISO 11469
Polymer Family	POM	
Polymer Type	POM Homopolymer	
Processing Method	Injection Molding	
Product Category	Unreinforced Resins	
Region Available - Global	Yes	

Resin Identification Descriptive Properties	POM Value	ISO 1043 Comments
RoHS Compliance	Contact Manufacturer	
Ultrasonic Weldable	Yes	
Uses	Gears	
	General Purpose	
	Parts, Engineering	
	Parts, Thin-walled	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China