

DuPont Performance Polymers Delrin® 300CP NC010 Acetal (POM) (Unverified Data**)

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Homopolymer, Unreinforced

Material Notes:

Medium-high Viscosity Acetal Homopolymer with Improved Processing Delrin 300CP is a medium-high viscosity acetal homopolymer with improved thermal stability and an outstanding balance of ease of processing and part performance. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Delrin-300CP-NC010-Acetal-POM-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.42 g/cc	0.0513 lb/in ³	ISO 1183
Water Absorption	0.90 % @Thickness 2.00 mm	0.90 % @Thickness 0.0787 in	Sim. to ISO 62
Moisture Absorption	0.170 % @Thickness 2.00 mm	0.170 % @Thickness 0.0787 in	Sim. to ISO 62
Linear Mold Shrinkage, Flow	0.021 cm/cm	0.021 in/in	ISO 294-4 2577
Linear Mold Shrinkage, Transverse	0.018 cm/cm	0.018 in/in	ISO 294-4 2577
Melt Flow	6.0 g/10 min @Load 2.16 kg, Temperature 190 °C	6.0 g/10 min @Load 4.76 lb, Temperature 374 °F	cm ³ /10min; ISO 1133
	7.0 g/10 min @Load 2.16 kg, Temperature 190 °C	7.0 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Stress	8.17 MPa @Strain 0.240 %, Temperature -20.0 °C	1180 psi @Strain 0.240 %, Temperature -4.00 °F	ISO 11403-1 -2
	18.15 MPa @Strain 0.660 %, Temperature 40.0 °C	2632 psi @Strain 0.660 %, Temperature 104 °F	ISO 11403-1 -2
	25.2 MPa @Strain 0.840 %, Temperature 23.0 °C	3650 psi @Strain 0.840 %, Temperature 73.4 °F	ISO 11403-1 -2
	33.4 MPa	4840 psi	

Mechanical Properties	Metric	English	Comments
	@Strain 1.08 %, Temperature 0.000 °C	@Strain 1.08 %, Temperature 32.0 °F	ISO 11403-1 -2
	44.17 MPa	6406 psi	
	@Strain 1.22 %, Temperature -40.0 °C	@Strain 1.22 %, Temperature -40.0 °F	ISO 11403-1 -2
	62.56 MPa	9074 psi	
	@Strain 10.16 %, Temperature 40.0 °C	@Strain 10.16 %, Temperature 104 °F	ISO 11403-1 -2
	64.46 MPa	9349 psi	
	@Strain 5.56 %, Temperature 23.0 °C	@Strain 5.56 %, Temperature 73.4 °F	ISO 11403-1 -2
	70.99 MPa	10300 psi	
	@Strain 13.68 %, Temperature 23.0 °C	@Strain 13.68 %, Temperature 73.4 °F	ISO 11403-1 -2
	77.91 MPa	11300 psi	
	@Strain 7.91 %, Temperature 0.000 °C	@Strain 7.91 %, Temperature 32.0 °F	ISO 11403-1 -2
	81.86 MPa	11870 psi	
	@Strain 5.01 %, Temperature -20.0 °C	@Strain 5.01 %, Temperature -4.00 °F	ISO 11403-1 -2
	89.1 MPa	12900 psi	
	@Strain 12.35 %, Temperature -20.0 °C	@Strain 12.35 %, Temperature -4.00 °F	ISO 11403-1 -2
	93.64 MPa	13580 psi	
	@Strain 5.29 %, Temperature -40.0 °C	@Strain 5.29 %, Temperature -40.0 °F	ISO 11403-1 -2
	99.44 MPa	14420 psi	
	@Strain 10.64 %, Temperature -40.0 °C	@Strain 10.64 %, Temperature -40.0 °F	ISO 11403-1 -2
Tensile Strength, Yield	71.0 MPa	10300 psi	ISO 527-1/-2
Elongation at Break	40 %	40 %	Nominal; ISO 527-1/-2
Elongation at Yield	23 %	23 %	ISO 527-1/-2
Tensile Modulus	3.10 GPa	450 ksi	ISO 527-1/-2
Flexural Modulus	3.00 GPa	435 ksi	ISO 178
Secant Modulus	0.437 GPa	63.3 ksi	
	@Strain 6.00 %,	@Strain 6.00 %,	ISO 11403-1 -2

Mechanical Properties	Temperature 100 °C Metric	Temperature 212 °F English	Comments
	0.513 GPa	74.4 ksi	
	@Strain 7.00 %, Temperature 80.0 °C	@Strain 7.00 %, Temperature 176 °F	ISO 11403-1 -2
	0.599 GPa	86.8 ksi	
	@Strain 14.97 %, Temperature -20.0 °C	@Strain 14.97 %, Temperature -4.00 °F	ISO 11403-1 -2
	0.608 GPa	88.2 ksi	
	@Strain 3.70 %, Temperature 100 °C	@Strain 3.70 %, Temperature 212 °F	ISO 11403-1 -2
	0.616 GPa	89.3 ksi	
	@Strain 10.16 %, Temperature 40.0 °C	@Strain 10.16 %, Temperature 104 °F	ISO 11403-1 -2
	0.750 GPa	109 ksi	
	@Strain 4.20 %, Temperature 80.0 °C	@Strain 4.20 %, Temperature 176 °F	ISO 11403-1 -2
	0.802 GPa	116 ksi	
	@Strain 12.47 %, Temperature -40.0 °C	@Strain 12.47 %, Temperature -40.0 °F	ISO 11403-1 -2
	0.811 GPa	118 ksi	
	@Strain 1.80 %, Temperature 100 °C	@Strain 1.80 %, Temperature 212 °F	ISO 11403-1 -2
	0.925 GPa	134 ksi	
	@Strain 0.400 %, Temperature 100 °C	@Strain 0.400 %, Temperature 212 °F	ISO 11403-1 -2
	0.985 GPa	143 ksi	
	@Strain 7.91 %, Temperature 0.000 °C	@Strain 7.91 %, Temperature 32.0 °F	ISO 11403-1 -2
	1.03 GPa	149 ksi	
	@Strain 2.10 %, Temperature 80.0 °C	@Strain 2.10 %, Temperature 176 °F	ISO 11403-1 -2
	1.16 GPa	168 ksi	
	@Strain 5.56 %, Temperature 23.0 °C	@Strain 5.56 %, Temperature 73.4 °F	ISO 11403-1 -2
	1.28 GPa	186 ksi	
	@Strain 0.500 %, Temperature 80.0 °C	@Strain 0.500 %, Temperature 176 °F	ISO 11403-1 -2
	1.63 GPa	237 ksi	

Mechanical Properties	Metric	English	Comments
	@Strain 5.01 %, Temperature -20.0 °C	@Strain 5.01 %, Temperature -4.00 °F	ISO 11403-1 -2
	1.77 GPa	257 ksi	
	@Strain 5.29 %, Temperature -40.0 °C	@Strain 5.29 %, Temperature -40.0 °F	ISO 11403-1 -2
	2.75 GPa	399 ksi	
	@Strain 0.660 %, Temperature 40.0 °C	@Strain 0.660 %, Temperature 104 °F	ISO 11403-1 -2
	3.00 GPa	435 ksi	
	@Strain 0.840 %, Temperature 23.0 °C	@Strain 0.840 %, Temperature 73.4 °F	ISO 11403-1 -2
	3.09 GPa	449 ksi	
	@Strain 1.08 %, Temperature 0.000 °C	@Strain 1.08 %, Temperature 32.0 °F	ISO 11403-1 -2
	3.40 GPa	494 ksi	
	@Strain 0.240 %, Temperature -20.0 °C	@Strain 0.240 %, Temperature -4.00 °F	ISO 11403-1 -2
	3.62 GPa	525 ksi	
	@Strain 1.22 %, Temperature -40.0 °C	@Strain 1.22 %, Temperature -40.0 °F	ISO 11403-1 -2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	34.0 J/cm ²	162 ft-lb/in ²	
	@Temperature -30.0 °C	@Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched	1.05 J/cm ²	5.00 ft-lb/in ²	ISO 179/1eA
	1.00 J/cm ²	4.76 ft-lb/in ²	
	@Temperature -30.0 °C	@Temperature -22.0 °F	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	110 µm/m-°C	61.1 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	110 µm/m-°C	61.1 µin/in-°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)	165 °C	329 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	ISO 75-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	IEC 60093
Dielectric Constant	3.5	3.5	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.8	3.8	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Comparative Tracking Index	600 V	600 V	IEC 60112

Descriptive Properties	Value	Comments
Additives	Release agent	
Delivery Form	Pellets	
Part Marking Code	>POM<	ISO 11469
Processing	Injection Moulding	
Regional Availability	Asia Pacific	
	Europe	
	Global	
	Near East/Africa	
	North America	
	South and Central America	
Resin Identification	POM	ISO 1043

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