

DuPont Performance Polymers Delrin® 520MP NC010 Acetal (POM) (Unverified Data**)

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

Material Notes:

20% Teflon® Lubricated Medium Viscosity Acetal Homopolymer with Low Wear and Low Friction Delrin 520MP is a medium viscosity acetal homopolymer containing 20% Teflon PTFE Micropowder. It is designed for applications requiring low wear and/or friction information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Delrin-520MP-NC010-Acetal-POM-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.54 g/cc	0.0556 lb/in ³	ISO 1183
Linear Mold Shrinkage, Flow	0.019 cm/cm	0.019 in/in	ISO 294-4 2577
Linear Mold Shrinkage, Transverse	0.015 cm/cm	0.015 in/in	ISO 294-4 2577

Mechanical Properties	Metric	English	Comments
Tensile Stress	32.4 MPa	4700 psi	ISO 11403-1 -2
	@Strain 1.80 %, Temperature 23.0 °C	@Strain 1.80 %, Temperature 73.4 °F	
	33.3 MPa	4830 psi	ISO 11403-1 -2
	@Strain 1.10 %, Temperature -40.0 °C	@Strain 1.10 %, Temperature -40.0 °F	
	38.4 MPa	5570 psi	ISO 11403-1 -2
	@Strain 1.70 %, Temperature 0.000 °C	@Strain 1.70 %, Temperature 32.0 °F	
	49.2 MPa	7140 psi	ISO 11403-1 -2
	@Strain 7.10 %, Temperature 23.0 °C	@Strain 7.10 %, Temperature 73.4 °F	
50.2 MPa	7280 psi	ISO 11403-1 -2	
@Strain 12.4 %, Temperature 23.0 °C	@Strain 12.4 %, Temperature 73.4 °F		
50.6 MPa	7340 psi	ISO 11403-1 -2	
@Strain 17.8 %, Temperature 23.0 °C	@Strain 17.8 %, Temperature 73.4 °F		
57.2 MPa	8300 psi	ISO 11403-1 -2	
@Strain 6.90 %, Temperature 0.000 °C	@Strain 6.90 %, Temperature 32.0 °F		

Mechanical Properties	Metric (Pa)	English (psi)	Comments
	@Strain 12.1 %, Temperature 0.000 °C	@Strain 12.1 %, Temperature 32.0 °F	ISO 11403-1 -2
	58.5 MPa	8480 psi	
	@Strain 17.3 %, Temperature 0.000 °C	@Strain 17.3 %, Temperature 32.0 °F	ISO 11403-1 -2
	68.5 MPa	9940 psi	
	@Strain 4.20 %, Temperature -40.0 °C	@Strain 4.20 %, Temperature -40.0 °F	ISO 11403-1 -2
	72.6 MPa	10500 psi	
	@Strain 7.40 %, Temperature -40.0 °C	@Strain 7.40 %, Temperature -40.0 °F	ISO 11403-1 -2
	73.6 MPa	10700 psi	
	@Strain 10.5 %, Temperature -40.0 °C	@Strain 10.5 %, Temperature -40.0 °F	ISO 11403-1 -2
Tensile Strength, Yield	53.0 MPa	7690 psi	ISO 527-1/-2
Elongation at Break	15 %	15 %	Nominal; ISO 527-1/-2
Elongation at Yield	13 %	13 %	ISO 527-1/-2
Tensile Modulus	2.80 GPa	406 ksi	ISO 527-1/-2
Flexural Modulus	2.70 GPa	392 ksi	ISO 178
Secant Modulus	0.354 GPa	51.3 ksi	
	@Strain 6.30 %, Temperature 100 °C	@Strain 6.30 %, Temperature 212 °F	ISO 11403-1 -2
	0.354 GPa	51.4 ksi	
	@Strain 14.2 %, Temperature 23.0 °C	@Strain 14.2 %, Temperature 73.4 °F	ISO 11403-1 -2
	0.419 GPa	60.8 ksi	
	@Strain 13.9 %, Temperature 0.000 °C	@Strain 13.9 %, Temperature 32.0 °F	ISO 11403-1 -2
	0.441 GPa	64.0 ksi	
	@Strain 6.80 %, Temperature 80.0 °C	@Strain 6.80 %, Temperature 176 °F	ISO 11403-1 -2
	0.600 GPa	87.0 ksi	
	@Strain 3.10 %, Temperature 100 °C	@Strain 3.10 %, Temperature 212 °F	ISO 11403-1 -2
	0.693 GPa	101 ksi	

Mechanical Properties	Metric	English	Comments
	@Strain 7.10 %, Temperature 23.0 °C	@Strain 7.10 %, Temperature 73.4 °F	ISO 11403-1 -2
	0.747 GPa	108 ksi	
	@Strain 3.40 %, Temperature 80.0 °C	@Strain 3.40 %, Temperature 176 °F	ISO 11403-1 -2
	0.829 GPa	120 ksi	
	@Strain 6.90 %, Temperature 0.000 °C	@Strain 6.90 %, Temperature 32.0 °F	ISO 11403-1 -2
	0.850 GPa	123 ksi	
	@Strain 0.800 %, Temperature 100 °C	@Strain 0.800 %, Temperature 212 °F	ISO 11403-1 -2
	0.870 GPa	126 ksi	
	@Strain 8.40 %, Temperature -40.0 °C	@Strain 8.40 %, Temperature -40.0 °F	ISO 11403-1 -2
	1.07 GPa	155 ksi	
	@Strain 0.900 %, Temperature 80.0 °C	@Strain 0.900 %, Temperature 176 °F	ISO 11403-1 -2
	1.63 GPa	237 ksi	
	@Strain 4.20 %, Temperature -40.0 °C	@Strain 4.20 %, Temperature -40.0 °F	ISO 11403-1 -2
	1.80 GPa	261 ksi	
	@Strain 1.80 %, Temperature 23.0 °C	@Strain 1.80 %, Temperature 73.4 °F	ISO 11403-1 -2
	2.26 GPa	328 ksi	
	@Strain 1.70 %, Temperature 0.000 °C	@Strain 1.70 %, Temperature 32.0 °F	ISO 11403-1 -2
	3.03 GPa	439 ksi	
	@Strain 1.10 %, Temperature -40.0 °C	@Strain 1.10 %, Temperature -40.0 °F	ISO 11403-1 -2
Izod Impact, Notched (ISO)	4.00 kJ/m ²	1.90 ft-lb/in ²	ISO 180/1A
Charpy Impact Unnotched	7.00 J/cm ²	33.3 ft-lb/in ²	ISO 179/1eU
Charpy Impact, Notched	0.400 J/cm ²	1.90 ft-lb/in ²	ISO 179/1eA
	0.400 J/cm ²	1.90 ft-lb/in ²	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Tensile Creep Modulus, 1 hour	1500 MPa	218000 psi	ISO 899-1
	@Time 3600 sec	@Time 1.00 hour	

Mechanical Properties	Metric Pa	English psi	Comments
Tensile Creep Modulus, 1000 hours	@Time 3.60e+6 sec	@Time 1000 hour	ISO 899-1

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	100 µm/m-°C	55.6 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	97.0 µm/m-°C	53.9 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)	160 °C	320 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	94.0 °C	201 °F	ISO 75-1/-2
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	IEC 60695-11-10

Descriptive Properties	Value	Comments
Additives	Lubricants	
	Release agent	
Delivery Form	Pellets	
Emission of organic compounds	7.5 µgC/g	VDA 277
Part Marking Code	>POM-SD20<	ISO 11469
Processing	Injection Moulding	
Regional Availability	Asia Pacific	
	Europe	
	Global	
	Near East/Africa	
	North America	
	South and Central America	
Resin Identification	POM-SD20	ISO 1043
UL recognition	UL	

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