

## DuPont Performance Polymers Delrin® 100T NC010 Acetal Homopolymer (Unverified Data\*\*)

Category : Polymer , Thermoplastic , Acetal (POM)

### Material Notes:

Delrin® 100T NC010 is a toughened, high viscosity acetal homopolymer grade with high impact resistance. Information provided by DuPont Performance Polymers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Performance-Polymers-Delrin-100T-NC010-Acetal-Homopolymer-nbspUnverified-Data.php](http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Delrin-100T-NC010-Acetal-Homopolymer-nbspUnverified-Data.php)

Physical Properties	Metric	English	Comments
Density	1.37 g/cc	0.0495 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.30 %	0.30 %	Equilibrium 50%RH; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Linear Mold Shrinkage, Flow	0.90 %	0.90 %	Saturation, immersed; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Linear Mold Shrinkage, Transverse	0.021 cm/cm	0.021 in/in	ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Melt Flow	0.019 cm/cm	0.019 in/in	ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Melt Index of Compound	2.0 g/10 min	2.0 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	
Melt Index of Compound	2.0 g/10 min	2.0 g/10 min	cm <sup>3</sup> /10 min; ISO 1133
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	59	59	ISO 2039/2
Hardness, Rockwell R	113	113	ISO 2039/2
Tensile Stress	8.54 MPa	1240 psi	ISO 527
	@Strain 1.63 %, Temperature 90.0 °C	@Strain 1.63 %, Temperature 194 °F	
Tensile Stress	13.6 MPa	1970 psi	ISO 527
	@Strain 3.26 %, Temperature 90.0 °C	@Strain 3.26 %, Temperature 194 °F	

Mechanical Properties	Metric <sup>Pa</sup>	English <sup>l</sup>	Comments
	@Strain 2.00 %, Temperature 60.0 °C	@Strain 2.00 %, Temperature 140 °F	ISO 527
	17.1 MPa	2480 psi	
	@Strain 4.89 %, Temperature 90.0 °C	@Strain 4.89 %, Temperature 194 °F	ISO 527
	19.3 MPa	2800 psi	
	@Strain 6.52 %, Temperature 90.0 °C	@Strain 6.52 %, Temperature 194 °F	ISO 527
	21.0 MPa	3050 psi	
	@Strain 8.14 %, Temperature 90.0 °C	@Strain 8.14 %, Temperature 194 °F	ISO 527
	21.7 MPa	3150 psi	
	@Strain 4.00 %, Temperature 60.0 °C	@Strain 4.00 %, Temperature 140 °F	ISO 527
	22.0 MPa	3190 psi	
	@Strain 1.90 %, Temperature 40.0 °C	@Strain 1.90 %, Temperature 104 °F	ISO 527
	22.1 MPa	3210 psi	
	@Strain 9.78 %, Temperature 90.0 °C	@Strain 9.78 %, Temperature 194 °F	ISO 527
	22.9 MPa	3320 psi	
	@Strain 11.41 %, Temperature 90.0 °C	@Strain 11.41 %, Temperature 194 °F	ISO 527
	23.4 MPa	3390 psi	
	@Strain 13.04 %, Temperature 90.0 °C	@Strain 13.04 %, Temperature 194 °F	ISO 527
	23.6 MPa	3420 psi	
	@Strain 14.67 %, Temperature 90.0 °C	@Strain 14.67 %, Temperature 194 °F	ISO 527
	23.7 MPa	3440 psi	
	@Strain 16.29 %, Temperature 90.0 °C	@Strain 16.29 %, Temperature 194 °F	ISO 527
	27.0 MPa	3920 psi	
	@Strain 6.00 %, Temperature 60.0 °C	@Strain 6.00 %, Temperature 140 °F	ISO 527
	29.0 MPa	4210 psi	
			ISO 527

Mechanical Properties	@Strain 2.54 %, Metric Temperature 23.0 °C	@Strain 2.54 %, English Temperature 73.4 °F	Comments
	<b>30.7 MPa</b>	<b>4450 psi</b>	
	@Strain 8.00 %, Temperature 60.0 °C	@Strain 8.00 %, Temperature 140 °F	ISO 527
	<b>31.0 MPa</b>	<b>4500 psi</b>	
	@Strain 3.80 %, Temperature 40.0 °C	@Strain 3.80 %, Temperature 104 °F	ISO 527
	<b>33.0 MPa</b>	<b>4790 psi</b>	
	@Strain 10.0 %, Temperature 60.0 °C	@Strain 10.0 %, Temperature 140 °F	ISO 527
	<b>34.5 MPa</b>	<b>5000 psi</b>	
	@Strain 12.0 %, Temperature 60.0 °C	@Strain 12.0 %, Temperature 140 °F	ISO 527
	<b>35.2 MPa</b>	<b>5110 psi</b>	
	@Strain 14.0 %, Temperature 60.0 °C	@Strain 14.0 %, Temperature 140 °F	ISO 527
	<b>35.4 MPa</b>	<b>5130 psi</b>	
	@Strain 16.0 %, Temperature 60.0 °C	@Strain 16.0 %, Temperature 140 °F	ISO 527
	<b>35.6 MPa</b>	<b>5160 psi</b>	
	@Strain 18.0 %, Temperature 60.0 °C	@Strain 18.0 %, Temperature 140 °F	ISO 527
	<b>35.7 MPa</b>	<b>5180 psi</b>	
	@Strain 20.0 %, Temperature 60.0 °C	@Strain 20.0 %, Temperature 140 °F	ISO 527
	<b>36.0 MPa</b>	<b>5220 psi</b>	
	@Strain 2.64 %, Temperature 0.000 °C	@Strain 2.64 %, Temperature 32.0 °F	ISO 527
	<b>36.8 MPa</b>	<b>5340 psi</b>	
	@Strain 5.70 %, Temperature 40.0 °C	@Strain 5.70 %, Temperature 104 °F	ISO 527
	<b>40.0 MPa</b>	<b>5800 psi</b>	
	@Strain 7.60 %, Temperature 40.0 °C	@Strain 7.60 %, Temperature 104 °F	ISO 527
	<b>40.0 MPa</b>	<b>5800 psi</b>	
	@Strain 2.31 %, Temperature -20.0 °C	@Strain 2.31 %, Temperature -4.00 °F	ISO 527

Mechanical Properties	40.9 MPa Metric	5930 psi English	Comments ISO 527
	@Strain 5.08 %, Temperature 23.0 °C	@Strain 5.08 %, Temperature 73.4 °F	
	<b>42.0 MPa</b>	<b>6090 psi</b>	ISO 527
	@Strain 9.50 %, Temperature 40.0 °C	@Strain 9.50 %, Temperature 104 °F	
	<b>43.2 MPa</b>	<b>6270 psi</b>	ISO 527
	@Strain 11.4 %, Temperature 40.0 °C	@Strain 11.4 %, Temperature 104 °F	
	<b>44.0 MPa</b>	<b>6380 psi</b>	ISO 527
	@Strain 13.3 %, Temperature 40.0 °C	@Strain 13.3 %, Temperature 104 °F	
	<b>44.5 MPa</b>	<b>6450 psi</b>	ISO 527
	@Strain 15.2 %, Temperature 40.0 °C	@Strain 15.2 %, Temperature 104 °F	
	<b>44.6 MPa</b>	<b>6470 psi</b>	ISO 527
	@Strain 17.1 %, Temperature 40.0 °C	@Strain 17.1 %, Temperature 104 °F	
	<b>44.7 MPa</b>	<b>6480 psi</b>	ISO 527
	@Strain 21.0 %, Temperature 40.0 °C	@Strain 21.0 %, Temperature 104 °F	
	<b>46.32 MPa</b>	<b>6718 psi</b>	ISO 527
	@Strain 7.62 %, Temperature 23.0 °C	@Strain 7.62 %, Temperature 73.4 °F	
	<b>48.68 MPa</b>	<b>7060 psi</b>	ISO 527
	@Strain 10.16 %, Temperature 23.0 °C	@Strain 10.16 %, Temperature 73.4 °F	
	<b>49.37 MPa</b>	<b>7161 psi</b>	ISO 527
	@Strain 5.28 %, Temperature 0.000 °C	@Strain 5.28 %, Temperature 32.0 °F	
	<b>49.92 MPa</b>	<b>7240 psi</b>	ISO 527
	@Strain 12.7 %, Temperature 23.0 °C	@Strain 12.7 %, Temperature 73.4 °F	
	<b>50.53 MPa</b>	<b>7329 psi</b>	ISO 527
	@Strain 15.24 %, Temperature 23.0 °C	@Strain 15.24 %, Temperature 73.4 °F	
	<b>50.93 MPa</b>	<b>7387 psi</b>	ISO 527
	@Strain 17.77 %,	@Strain 17.77 %,	

Mechanical Properties	Temperature 23.0 °C	Temperature 73.4 °F	Comments
	Metric	English	
	51.13 MPa	7416 psi	
	@Strain 20.32 %, Temperature 23.0 °C	@Strain 20.32 %, Temperature 73.4 °F	ISO 527
	51.24 MPa	7432 psi	
	@Strain 22.86 %, Temperature 23.0 °C	@Strain 22.86 %, Temperature 73.4 °F	ISO 527
	51.24 MPa	7432 psi	
	@Strain 25.4 %, Temperature 23.0 °C	@Strain 25.4 %, Temperature 73.4 °F	ISO 527
	53.92 MPa	7820 psi	
	@Strain 7.92 %, Temperature 0.000 °C	@Strain 7.92 %, Temperature 32.0 °F	ISO 527
	55.5 MPa	8050 psi	
	@Strain 4.62 %, Temperature -20.0 °C	@Strain 4.62 %, Temperature -4.00 °F	ISO 527
	56.05 MPa	8129 psi	
	@Strain 10.56 %, Temperature 0.000 °C	@Strain 10.56 %, Temperature 32.0 °F	ISO 527
	57.22 MPa	8299 psi	
	@Strain 13.2 %, Temperature 0.000 °C	@Strain 13.2 %, Temperature 32.0 °F	ISO 527
	57.85 MPa	8390 psi	
	@Strain 15.84 %, Temperature 0.000 °C	@Strain 15.84 %, Temperature 32.0 °F	ISO 527
	58.25 MPa	8448 psi	
	@Strain 18.48 %, Temperature 0.000 °C	@Strain 18.48 %, Temperature 32.0 °F	ISO 527
	58.53 MPa	8489 psi	
	@Strain 21.12 %, Temperature 0.000 °C	@Strain 21.12 %, Temperature 32.0 °F	ISO 527
	58.54 MPa	8491 psi	
	@Strain 23.76 %, Temperature 0.000 °C	@Strain 23.76 %, Temperature 32.0 °F	ISO 527
	58.64 MPa	8505 psi	
	@Strain 26.4 %, Temperature 0.000 °C	@Strain 26.4 %, Temperature 32.0 °F	ISO 527
	61.0 MPa	8850 psi	

Mechanical Properties	Metric	English	ISO 527 Comments
	@Strain 6.93 %, Temperature -20.0 °C	@Strain 6.93 %, Temperature -4.00 °F	
	63.89 MPa	9266 psi	
	@Strain 9.24 %, Temperature -20.0 °C	@Strain 9.24 %, Temperature -4.00 °F	ISO 527
	65.21 MPa	9458 psi	
	@Strain 11.54 %, Temperature -20.0 °C	@Strain 11.54 %, Temperature -4.00 °F	ISO 527
	66.2 MPa	9600 psi	
	@Strain 13.85 %, Temperature -20.0 °C	@Strain 13.85 %, Temperature -4.00 °F	ISO 527
	67.0 MPa	9720 psi	
	@Strain 16.16 %, Temperature -20.0 °C	@Strain 16.16 %, Temperature -4.00 °F	ISO 527

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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