

DuPont™ Delrin®

acetal resin

Delrin® 500PE NC010

Delrin® 500PE NC010 is a medium viscosity acetal homopolymer for injection molding. Delrin® 500PE is formulated for low emissions.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM
Part Marking Code	ISO 11469		>POM<
Mechanical			
Yield Stress	ISO 527	MPa (kpsi)	70 (10.1)
Yield Strain	ISO 527	%	17
Nominal Strain at Break	ISO 527	%	25
Tensile Modulus	ISO 527	MPa (kpsi)	3000 (435)
Flexural Modulus	ISO 178	MPa (kpsi)	2900 (420)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-30°C (-22°F)			7
23°C (73°F)			9
Thermal			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
1.80MPa			97 (205)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			178 (352)
Rheological			
Melt Mass-Flow Rate	ISO 1133	g/10 min	
190°C, 2.16kg			15
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1420 (1.42)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.9
Parallel, 2.0mm			1.8

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
 ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
 Test temperatures are 23°C unless otherwise stated.

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Product Information

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Property	Test Method	Units	Value
Processing			
Melt Temperature Range		°C (°F)	200-210 (390-410)
Melt Temperature Optimum		°C (°F)	205 (400)
Mold Temperature Range		°C (°F)	80-100 (175-210)
Mold Temperature Optimum		°C (°F)	90 (195)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.2
Hold Pressure Range		MPa (kpsi)	80-100 (12-15)

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