

Product Information



Delrin®

acetal resin

Delrin® 500 NC010

Medium Viscosity Acetal

Delrin® 500 is a medium viscosity resin for general purpose use. Delrin® 500 provides optimum mechanical performance.

Property	Test Method	Units	Value
Mechanical			
Yield Stress	ISO 527-1/-2	MPa	72
Yield Strain	ISO 527-1/-2	%	15
Nominal Strain at Break	ISO 527-1/-2	%	30
Strain at Break	ISO 527-1/-2	%	45
Tensile Modulus	ISO 527-1/-2	MPa	3200
Flexural Modulus	ISO 178	MPa	3000
Notched Izod Impact	ISO 180/1A	kJ/m2	
-40C			9
23C			9
Notched Charpy Impact	ISO 179/1eA	kJ/m2	
-30C			8
23C			9
Unnotched Charpy Impact	ISO 179/1eU	kJ/m2	
-30C			300
23C			340
Thermal			
Deflection Temperature	ISO 75-1/-2	°C	
0.45MPa			165
1.80MPa			100
Melting Temperature	ISO 3146C	°C	178
Flow			
Melt Flow Rate	ISO 1133	g/10 min	
190C, 2.16kg			14

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.

Mechanical properties measured at 23°C (73°F) unless otherwise stated.

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990420/991021

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Property	Test Method	Units	Value
Electrical			
Surface Resistivity 1mm	IEC 60093	ohm	>1E15
Relative Permittivity 1E2 Hz, 1mm	IEC 60250		3.4
1E6 Hz, 1mm			3.3
Volume Resistivity 1mm	IEC 60093	ohm cm	1E15
Dissipation Factor 1E2 Hz, 1mm	IEC 60250	E-4	100
1E6 Hz, 1mm			70
Electric Strength 1mm	IEC 60243-1	kV/mm	32
Other			
Density	ISO 1183	kg/m3	1420
Hardness, Rockwell	ISO 2039/2		R120
Humidity Absorption Equilibrium 50%RH	ISO 62, Similar to	%	0.22
Water Absorption Saturation, immersed	ISO 62, Similar to	%	0.9
Molding Shrinkage Normal	ISO 294-4	%	2
Parallel			2.1
Processing			
Melt Temperature Range		°C	210-220
Mold Temperature Range		°C	80-100
Hold Pressure Range		MPa	80-100

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