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U-100 (neat polymer)
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U-polymer
U-100 (Neat Polymer)
U-100 is a pure polyarylate resin (neat polymer).
Characteristics

- Transparent, heat resistant, deflection temperature under load: 175°C (under a load of 1.8 MPa)
- Large elastic recovery
- Weather resistant
- High dimensional stability
- High surface hardness

Properties

		Item	ASTM	Unit: SI (conventional)	U-100
		Density	D-792	-	1.21
		Water absorption (1/8", 24hrs)	D-570	%	0.26
		Light transmittance (Thickness: 3mm)	D-1003	%	87
		Tensile strength	D-638	MPa {kg/cm ² }	69 {700}
Mechanical		Elongation at break	D-638	%	60
Properties		Bending strength	D-790	MPa {kg/cm ² }	84 {860}
		Bending modulus	D-790	GPa {kg/cm ² }	2.1 {22,000}
		Compressive strength (Yield)	D-695	MPa {kg/cm ² }	84 {860}
		Izod impact strength (1/8", with notch)	D-256	J/m {kg-Ecm/cm}	225 {23}
		Rockwell hardness	D-785	R	125
Thermal		Deflection temperature under load 1.8MPa {18.6kg/cm ² }	D-648	°C	175
properties		Linear expansion coefficient	D-696	10 ⁻⁵ /K {10 ⁻⁵ cm/cm/°C}	6.1
		Dielectric breakdown strength	D-149	MV/m {kv/mm}	39
		Specific volume resistivity	D-257	Ωm {Ωcm}	2x10 ¹⁴ {2x10 ¹⁶ }
Electrical		Dielectric constant (10 ⁶ Hz)	D-150	PF/m	27 {3.0}
Properties		Dielectric dissipation factor(10 ⁶ Hz)	D-150	-	0.015
		Ark resistance	D-495	s	130
		Tracking resistance	IEC	V	220
Other		Molding shrinkage (Thickness: 3mm)	-	%	0.8
properties		Flow direction, orthogonal direction			

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