Iupital

Polyacetal Resin

Properties	Test Method	Terms	Units	Standard				
				F10	**F20**	**F25**	**F30**	**F40**
				High Viscosity	Medium Viscosity	Medium Viscosity	Low Viscosity	Low Viscosity
				-01: No lubrication	-02: Standard	-03: Low mould deposit		
Physical properties								
Density	ISO 1183	-	g/cm^3	1.41	1.41	1.41	1.41	1.41
Water absorption	-	23degC, 60%RH	%	0.22	0.22	0.22	0.22	0.22
Rheological properties								
Melt Mass-flow Rate Melt Volume-flow Rate	ISO 1133	 Temperature Load	g/10min cm^3/10min degC kg	2.5 2.2 190 2.16	9.0 7.7 190 2.16	16 14 190 2.16	27 23 190 2.16	52 45 190 2.16
Moulding shrinkage (3mmt)	-	MD TD	%	2.2 -	2.0 -	2.0 -	2.0 -	2.0 -
Mechanical properties								
Tensile modulus Yield stress Yield strain Nominal strain at break Stress at 50% strain Stress at break Strain at break	ISO 527-1 , 527-2	-	MPa MPa % MPa % %	2800 63 10 33 - - -	2900 64 8.5 30 - - -	2900 64 8.0 27 - - -	2900 64 7.5 25 - - -	2900 64 7.0 20 - - -
Flexural strength Flexural modulus	ISO 178	-	MPa	89 2500	90 2600	90 2600	91 2700	91 2700
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m^2	280	250	200	150	100
Charpy notched impact strength		23 degC	kJ/m^2	8.0	7.0	6.5	6.0	5.0
Thermal properties								
Melting temperature	ISO 11357-3		degC	166	166	166	166	166
Glass transition temperature	ISO 11357-2		degC	-	-	-	-	-
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	105 156	105 156	105 156	105 156	105 156
Vicat softening temperature	ISO 306	-	degC	-	-	-	-	-
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	1.1E-04 1.1E-04	1.1E-04 1.1E-04	1.1E-04 1.1E-04	1.1E-04 1.1E-04	1.1E-04 1.1E-04
Flammability	UL94	0.8mmt	-	HB	HB	HB	HB	HB
Electrical properties								
Relative permittivity	IEC 60250	100Hz 1MHz	- -	3.9 3.9	3.9 3.9	3.9 3.9	3.9 3.9	3.9 3.9
Dissipation factor	IEC 60250	100Hz 1MHz	- -	0.002 0.007	0.002 0.007	0.002 0.007	0.002 0.007	0.002 0.007
Volume resistivity	IEC 60093	-	ohm-m	1.E+12	1.E+12	1.E+12	1.E+12	1.E+12
Surface resistivity	IEC 60093	-	ohm	1.E+16	1.E+16	1.E+16	1.E+16	1.E+16
Electric strength	IEC 60243-1	1mmt 2mmt 3mmt	MV/m	32 - 19	32 - 19	32 - 19	32 - 19	32 - 19
Comparative tracking index	IEC 60112	-	-	600	600	600	600	600

The listed properties are portrayed as general information only and are not product specifications.
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