Iupital

Polyacetal Resin

				Low friction and Wear-Resistant		
Properties	**Test Method**	**Terms**	**Units**	**FL2010**	**FL2020**	**FS2022**
				-	-	Silicone Oil Contained
				PTFE	PTFE	-
				10%	20%	-
Physical properties						
Density	ISO 1183	-	g/cm^3	1.46	1.51	1.41
Water absorption	-	23degC, 60%RH	%	0.19	0.18	0.22
Rheological properties						
Melt Mass-flow Rate	ISO 1133	Temperature	g/10min	7.5	6	10
Melt Volume-flow Rate		Temperature	cm^3/10min	6.1	4.7	8.6
		Temperature	degC	190	190	190
		Load	kg	2.16	2.16	2.16
Moulding shrinkage (3mmt)	-	MD	%	2.0	2.1	2.0
		TD		-	-	-
Mechanical properties						
Tensile modulus	ISO 527-1 , 527-2	-	MPa	2650	2400	2700
Yield stress				52	44	56
Yield strain			%	8.0	8.0	10.0
Nominal strain at break				18	15	51
Stress at break			MPa	-	-	-
Strain at break			%	-	-	-
Flexural strength	ISO 178	-	MPa	77	67	83
Flexural modulus				2400	2200	2500
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m^2	60	50	150
Charpy notched impact strength		23 degC	kJ/m^2	5.0	5.0	7.5
Thermal properties						
Melting temperature	ISO 11357-3		degC	166	166	166
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa	degC	97	96	100
		0.45MPa		154	151	150
Coefficient of Linear thermal expansion	ISO 11359-2	MD	1/degC	1.1E-04	-	1.1E-04
		TD		1.1E-04	-	1.1E-04
Flammability	UL94	0.8mmt	-	HB	HB	HB
Electrical properties						
Relative permittivity	IEC 60250	100Hz	-	-	-	-
		1MHz	-	-	-	-
Dissipation factor	IEC 60250	100Hz	-	-	-	-
		1MHz	-	-	-	-
Volume resistivity	IEC 60093	-	ohm-m	1.E+12	1.E+12	1.E+12
Surface resistivity	IEC 60093	-	ohm	1.E+16	1.E+16	1.E+16
Electric strength	IEC 60243-1	1mmt	MV/m	25	-	-
		3mmt		16	-	-
Comparative tracking index	IEC 60112	-	-	600	-	-