

Oupiace

Modified PPE Resin

Properties	Test Method	Terms	Units	High Flowability (For chassis use)					
				GX1050	GX1210	AP6GM2	AP6GM4	AP4GM6	LGX420N
				Reinforced	Reinforced	Reinforced	Reinforced	Reinforced	
				GF+Filler 20%	GF+Filler 35%	GF+Filler 10%	GF+Filler 20%	GF+Filler 30%	GF 20%
Physical properties									
Density	ISO 1183	-	g/cm ³	1.25	1.38	1.16	1.23	1.32	1.30
Water absorption	-	23degC, Underwater	%	0.06	0.06	0.06	0.06	0.06	0.06
Rheological properties									
Melt Volume-flow Rate	ISO 1133	Temperature	cm ³ /10min degC	24 300	9.0 300	28 280	31 280	25 280	50 280
		Load	kg	2.16	2.16	5	5	5	5
Moulding shrinkage (3.2mmt)	-	MD TD	%	0.2 - 0.4 0.3 - 0.5	0.1 - 0.3 0.2 - 0.4	0.3 - 0.5 0.3 - 0.5	0.2 - 0.4 0.3 - 0.5	0.1 - 0.3 0.2 - 0.4	0.15-0.35 0.2-0.4
Mechanical properties									
Tensile modulus	ISO 527-1 , 527-2	23 degC	MPa	6100	10500	4000	5700	7800	6200
Yield stress			-	-	-	-	-	-	-
Yield strain			%	-	-	-	-	-	-
Nominal strain at break			-	-	-	-	-	-	-
Stress at 50% strain			MPa	-	-	-	-	-	-
Stress at break			MPa	75	115	65	80	91	70
Strain at break			%	2.7	2.0	2.9	2.7	3.1	2.0
Flexural strength	ISO 178	23 degC	MPa	122	175	116	132	145	120
Flexural modulus					6000	10500	3800	5500	7300
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	-	-	-	-	-	-
Charpy notched impact strength		23 degC	kJ/m ²	5	5	7	6	6	3
Thermal properties									
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	105	115	95	115	115	105
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	3.7E-05 6.8E-05	- -	4.7E-05 5.8E-05	3.7E-05 6.8E-05	2.6E-05 6.1E-05	4.0E-05 5.5E-05
Flammability	UL94	0.75mmt	-	-	-	-	-	-	-
		1.5mmt	-	V-1	V-1	V-1	V-1	V-1	V-0
		3.0mmt	-	5VB	5VB	-	-	-	-
Electrical properties									
Relative permittivity	IEC 60250	100Hz	-	-	-	-	3.2	3.5	-
		1MHz	-	-	-	-	3.1	3.3	-
Dissipation factor	IEC 60250	100Hz	-	-	-	-	0.0057	0.0092	-
		1MHz	-	-	-	-	0.0067	0.0077	-
Volume resistivity	IEC 60093	-	ohm-m	5.E+13	-	5.E+13	5.E+13	2.E+13	3.E+14
Surface resistivity	IEC 60093	-	ohm	1.E+15	-	1.E+15	1.E+15	3.E+15	2.E+15
Electric strength	IEC 60243-1	1mmt	MV/m	-	-	-	35	34	-
		2mmt	-	-	-	-	-	-	-
		3mmt	-	-	-	-	18	17	-
Comparative tracking index	IEC 60112	-	-	175	-	200	200	150	-

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

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