

Oupiace

Modified PPE Resin

Properties	Test Method	Terms	Units	Fiber Reinforced HB		
				GH10	GH20	GH30
				-	-	-
				GF 10%	GF 20%	GF 30%
Physical properties						
Density	ISO 1183	-	g/cm ³	1.14	1.22	1.31
Water absorption	-	23degC, Underwater	%	0.06	0.06	0.06
Rheological properties						
Melt Volume-flow Rate	ISO 1133	Temperature	cm ³ /10min degC	5.0 300	4.4 300	2.7 300
		Load	kg	2.16	2.16	2.16
Moulding shrinkage (3.2mmt)	-	MD TD	%	0.2 - 0.4 0.3 - 0.5	0.1 - 0.3 0.2 - 0.4	0.1 - 0.2 0.2 - 0.4
Mechanical properties						
Tensile modulus	ISO 527-1 , 527-2	23 degC	MPa	4500	6600	8900
Yield stress			-	-	-	
Yield strain			%	-	-	-
Nominal strain at break			-	-	-	
Stress at 50% strain			MPa	-	-	-
Stress at break			MPa	75	89	103
Strain at break			%	2.6	1.5	1.3
Flexural strength	ISO 178	23 degC	MPa	140	154	176
Flexural modulus				4300	6400	8800
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	-	-	-
Charpy notched impact strength		23 degC	kJ/m ²	6	7	8
Thermal properties						
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	120 126	125 131	130 136
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	4.5E-05 7.5E-05	3.0E-05 6.8E-05	2.5E-05 6.0E-05
Flammability	UL94	0.75mmt	-	HB	HB	HB
		1.5mmt	-	-	-	-
		3.0mmt	-	-	-	-
Electrical properties						
Relative permittivity	IEC 60250	100Hz 1MHz	-	-	-	-
Dissipation factor	IEC 60250	100Hz 1MHz	-	-	-	-
Volume resistivity	IEC 60093	-	ohm-m	3.E+14	3.E+14	3.E+14
Surface resistivity	IEC 60093	-	ohm	6.E+15	6.E+15	6.E+15
Electric strength	IEC 60243-1	1mmt	MV/m	34	32	30
		2mmt		-	-	-
		3mmt		20	17	17
Comparative tracking index	IEC 60112	-	-	175	175	150

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

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