

# Dupilon

Polycarbonate Resin

Properties				Glass Fiber Reinforced (Flame Retardant, Low Warpage)					
				EGN2020DF	EGN2030DF	EGN2040DF	EGN2050DF		
Test Method	Terms	Units	Non Br & Non P	Non Br & Non P	Non Br & Non P	Non Br & Non P			
			GF	GF	GF	GF			
			20%	30%	40%	50%			
			-	-	-	-			
<b>Physical properties</b>									
Density	ISO 1183	-	g/cm <sup>3</sup>	1.35	1.43	1.52	1.63		
Water absorption		23degC, 50%RH 23degC, Underwater	%	- 0.11	- 0.09	- 0.08	- 0.07		
<b>Rheological properties</b>									
Melt Mass-flow Rate	ISO 1133	Temperature	g/10min	-	-	-	-		
Melt Volume-flow Rate			cm <sup>3</sup> /10min	-	-	-	-		
		degC		300	300	300	300		
		Load	kgf	1.20	1.20	1.20	1.20		
Moulding shrinkage (3.2mmt)	-	MD	%	0.2-0.4	0.15-0.35	0.1-0.3	0.1-0.3		
		TD		0.2-0.4	0.15-0.35	0.1-0.3	0.1-0.3		
<b>Mechanical properties</b>									
Tensile modulus	ISO 527-1 , 527-2	-	MPa	-	-	-	-		
Yield stress					-	-	-	-	
Yield strain					%	-	-	-	
Nominal strain at break						-	-	-	
Stress at 50% strain					MPa	74	74	88	89
Strain at break					%	3.7	2.9	2.8	2.2
Flexural strength	ISO 178	-	MPa	125	123	142	146		
Flexural modulus				5200	6800	9000	11600		
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m <sup>2</sup>	36	30	30	24		
Charpy notched impact strength		23 degC	kJ/m <sup>2</sup>	6	6	7	7		
<b>Thermal properties</b>									
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	133 139	135 140	138 142	138 142		
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	- -	- -	- -	- -		
Flammability	UL94	-	-	V-0(1.5mm) V-2(0.75mm)	V-0(1.5mm) V-2(0.75mm)	V-0(1.5mm)	V-0(1.5mm)		
<b>Electrical properties</b>									
Relative permittivity	IEC 60250	100Hz 1MHz	-	-	-	-	-		
Dissipation factor	IEC 60250	100Hz 1MHz	-	-	-	-	-		
Volume resistivity	IEC 60093	-	ohm-m	-	-	-	-		
Surface resistivity	IEC 60093	-	ohm	-	-	-	-		
Electric strength	IEC 60243-1	1mmt 2mmt 3mmt	MV/m	- - -	- - -	- - -	- - -		
Comparative tracking index (CTI)	UL746A	-	-	same as 3	same as 4	same as 4	same as 4		

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

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