

Vestamid

GLASSFIBER REINFORCED (25%), ELECTRICALLY CONDUCTIVE PA12 RESIN

Mechanical properties ISO	dry / cond	Unit	Test Standard
Tensile Modulus	6800^[1] / -	MPa	ISO 527-1/-2
Yield stress	120 / -	MPa	ISO 527-1/-2
Yield strain	4 / -	%	ISO 527-1/-2
Stress at break	120 / -	MPa	ISO 527-1/-2
Strain at break	5 / -	%	ISO 527-1/-2
Charpy impact strength, +23°C	75 / -	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	70 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	10^[2] / -	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	11 / -	kJ/m ²	ISO 179/1eA
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 20°C/min	178 / *	°C	ISO 11357-1/-3
Temp. of deflection under load A, 1.80 MPa	170 / *	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	175 / *	°C	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	175 / *	°C	ISO 306
Vicat softening temperature B, 50 N, 50 K/h	170 / *	°C	ISO 306
Coeff. of linear therm. expansion, 23°C to 55 °C, parallel	100 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, 23°C to 55 °C, normal	80 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1,6 / *	mm	-
Yellow Card available	yes / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3,2 / *	mm	-
Yellow Card available	yes / *	-	-

Physical properties	dry / cond	Unit	Test Standard
Water absorption	1,2 / *	%	Sim. to ISO 62
Humidity absorption	0,5 / *	%	Sim. to ISO 62
Density	1270 / -	kg/m ³	ISO 1183
Electrical properties			
Volume resistivity	1 / -	Ohm*m	IEC 60093
Surface resistance, RSD	1,00E2 / -	Ohm	IEC 62631-3-2
Surface resistivity, D	1,00E3 / -	Ohm per square	IEC 62631-3-2
Test specimen	UL-Stab /	-	-
Rheological properties			
Melt volume-flow rate, MVR	80 / *	cm ³ /10min	ISO 1133
Temperature	275 / *	°C	-
Load	21,6 / *	kg	-
Molding shrinkage, parallel	0,3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0,8 / *	%	ISO 294-4, 2577
Mold temperature	80 / *	°C	-
Melt temperature	240 / *	°C	-
Rheological calculation properties			
Density of melt	1020	kg/m ³	-
Thermal conductivity of melt	0,24	W/(m K)	-
Spec. heat capacity of melt	2020	J/(kg K)	-
Ejection temperature	180	°C	-
Test specimen production			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 10724
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	70	MPa	ISO 294

Characteristics: Industrial Sector Industry and Building Construction Processing Injection Molding

Special Characteristics: Electrical conductivity, light stabilized or stable to light, heat stabilized or stable to heat