

Generic ABS+PC - Glass Fiber

Polycarbonate + ABS

Generic

Message:

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General Information			
Filler / Reinforcement	Glass fiber reinforced material		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.17 - 1.43	g/cm ³	ASTM D792
23°C	1.17 - 1.43	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			
250°C/2.16 kg	2.3 - 4.1	g/10 min	ASTM D1238
260°C/5.0 kg	9.7 - 30	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	14.8 - 20.0	cm ³ /10min	ISO 1133
Molding Shrinkage			
Flow: 23°C	0.15 - 0.43	%	ASTM D955
Transverse flow: 23°C	0.25 - 0.65	%	ASTM D955
23°C	0.20 - 0.46	%	ISO 294-4
Water Absorption			
23°C, 24 hr	0.098 - 0.10	%	ASTM D570
23°C, 24 hr	0.29 - 0.60	%	ISO 62
Equilibrium, 23°C, 50% RH	0.20 - 0.25	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (23°C)	111 - 120		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
23°C	3450 - 9650	MPa	ASTM D638
23°C	3300 - 7800	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	58.3 - 125	MPa	ASTM D638
Yield, 23°C	58.3 - 95.6	MPa	ISO 527-2
Fracture, 23°C	48.8 - 110	MPa	ASTM D638
Fracture, 23°C	50.9 - 95.1	MPa	ISO 527-2
23°C	73.1 - 125	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C	2.5 - 5.0	%	ASTM D638
Yield, 23°C	2.1 - 5.5	%	ISO 527-2

Fracture, 23°C	1.5 - 7.4	%	ASTM D638
Fracture, 23°C	2.0 - 5.1	%	ISO 527-2
Flexural Modulus			
23°C	2450 - 8580	MPa	ASTM D790
23°C	3000 - 8230	MPa	ISO 178
Flexural Strength			
23°C	94.3 - 173	MPa	ASTM D790
23°C	92.3 - 144	MPa	ISO 178
Yield, 23°C	101 - 138	MPa	ASTM D790
Fracture, 23°C	99.7 - 142	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.9 - 10	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	25 - 40	kJ/m ²	ISO 179
Notched Izod Impact			
23°C	58 - 130	J/m	ASTM D256
23°C	4.0 - 14	kJ/m ²	ISO 180
Unnotched Izod Impact			
23°C	310 - 800	J/m	ASTM D256
23°C	21 - 38	kJ/m ²	ISO 180
Instrumented Dart Impact (23°C)	13.3 - 35.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, not annealed	92.0 - 139	°C	ASTM D648
0.45 MPa, not annealed	89.0 - 140	°C	ISO 75-2/B
1.8 MPa, not annealed	87.5 - 136	°C	ASTM D648
1.8 MPa, not annealed	112 - 124	°C	ISO 75-2/A
Vicat Softening Temperature			
--	101 - 144	°C	ASTM D1525
--	99.4 - 140	°C	ISO 306
Linear thermal expansion coefficient			
Flow	2.9E-5 - 6.1E-5	cm/cm/°C	ASTM D696
Flow	2.9E-5 - 7.7E-5	cm/cm/°C	ASTM E831
Flow	1.7E-5 - 7.7E-5	cm/cm/°C	ISO 11359-2
Lateral	6.5E-5 - 8.2E-5	cm/cm/°C	ASTM D696
Lateral	3.2E-5 - 7.3E-5	cm/cm/°C	ASTM E831
Lateral	7.9E-5 - 8.3E-5	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity			
--	1.0E+2 - 2.5E+14	ohms	ASTM D257
--	9.8E+14 - 1.0E+15	ohms	IEC 60093
Volume Resistivity			
23°C	5.1E+5 - 1.3E+16	ohms · cm	ASTM D257

23°C	1.0E+13 - 1.0E+15	ohms·cm	IEC 60093
Dielectric Strength (23°C)	26 - 36	kV/mm	ASTM D149
Arc Resistance	69.0 - 106	sec	ASTM D495
Comparative Tracking Index	100 - 256	V	IEC 60112
High Amp Arc Ignition (HAI)	15.0 - 150		UL 746
High Voltage Arc Tracking Rate (HVTR)	64.0 - 300	mm/min	UL 746
Hot-wire Ignition (HWI)	26 - 150	sec	UL 746
Flammability	Nominal Value	Unit	Test Method
Glow Wire Ignition Temperature	642 - 755	°C	IEC 60695-2-13
Injection	Nominal Value	Unit	
Drying Temperature	80.0 - 106	°C	
Drying Time	3.4 - 5.0	hr	
Dew Point	-28.9 - -28.6	°C	
Suggested Max Moisture	0.019 - 0.020	%	
Suggested Shot Size	50 - 60	%	
Rear Temperature	214 - 270	°C	
Middle Temperature	234 - 280	°C	
Front Temperature	245 - 285	°C	
Nozzle Temperature	235 - 286	°C	
Processing (Melt) Temp	249 - 291	°C	
Mold Temperature	59.4 - 81.4	°C	
Injection Pressure	85.9 - 87.9	MPa	
Back Pressure	0.0392 - 12.5	MPa	
Screw Speed	45 - 75	rpm	
Injection instructions			

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