

XANTAR™ EM 605

Mitsubishi Engineering-Plastics Corp - Polycarbonate + PET

General Information			
Product Description			
PC/PET, Chemical Resistant			
General			
Features	• Chemical Resistant		
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.21	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (280°C/1.2 kg)	7.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (280°C/1.2 kg)	7.0	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.60 to 0.80	%	
Flow	0.60 to 0.80	%	
Water Absorption (Saturation, 23°C)	0.35	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2200	MPa	ISO 527-1/1
Tensile Stress (Yield)	55.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	6.0	%	
Break	> 50	%	
Flexural Modulus ²	2200	MPa	ISO 178
Flexural Stress ²	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	25	kJ/m²	
23°C	55	kJ/m²	
Charpy Unnotched Impact Strength			ISO 179
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength			ISO 180/4A
-40°C	40	kJ/m²	
-20°C	60	kJ/m²	
23°C	70	kJ/m²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	120	°C	
Vicat Softening Temperature	130	°C	ISO 306
CLTE			ISO 11359-2
Flow	8.0E-5	cm/cm/°C	
Transverse	8.0E-5	cm/cm/°C	



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Thermal	Nominal Value	Unit	Test Method
Effective Thermal Diffusivity	7.14E-8	m²/s	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.5 mm)	HB		UL 94
Fill Analysis	Nominal Value	Unit	
Melt Density	1.08	g/cm³	
Melt Thermal Conductivity	0.16	W/m/K	
Specific Heat Capacity of Melt	2110	J/kg/°C	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	110	°C
Drying Time - Hot Air Dryer	6.0	hr
Rear Temperature	270 to 290	°C
Middle Temperature	270 to 290	°C
Front Temperature	270 to 290	°C
Nozzle Temperature	270 to 290	°C
Mold Temperature	70 to 90	°C
Ejection Temperature	120	°C

