EMERGE™ PC 8702-5

PC-GX20 Trinseo

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**5**	g/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
Molding shrinkage, parallel	**0.3**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**6000**	MPa	ISO 527
Yield stress	**100**	MPa	ISO 527
Stress at break	**90**	MPa	ISO 527
Strain at break	**4**	%	ISO 527
Flexural modulus, 23°C	**5500**	MPa	ISO 178
Charpy notched impact strength, +23°C	**8.5**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**8**	kJ/m²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**140**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**145**	°C	ISO 75-1/-2
Vicat softening temperature, B	**150**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**25**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**52**	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Burning behav. at thickness h	**V-2**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
Burning behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**3.0**	mm	-
Oxygen index	**35**	%	ISO 4589-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3.1**	-	IEC 62631-2-1
Dissipation factor, 100Hz	**25**	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	**160**	E-4	IEC 62631-2-1
Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**3E14**	Ohm	IEC 62631-3-2
Electric strength	**27**	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Density	**1330**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Melt temperature	**290 - 320**	°C	-
Mold temperature	**80 - 120**	°C	-

Characteristics

Processing

Injection Molding

Applications

IT / Business Machine, Electrical and Electronical

Additives
Release agent

Special Characteristics
Flame retardant, Phosphorus-free

Regional Availability
Europe, Asia Pacific, Near East/Africa