EMERGE™ PC 8080-15

PC — Trinseo

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**15**	g/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2400**	MPa	ISO 527
Yield stress	**62**	MPa	ISO 527
Stress at break	**60**	MPa	ISO 527
Strain at break	**110**	%	ISO 527
Flexural modulus, 23°C	**2350**	MPa	ISO 178
Flexural strength	**95**	MPa	ISO 178
Charpy notched impact strength, +23°C	**25**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**65**	kJ/m²	ISO 180/1A
Rockwell hardness	**M 73**	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**123**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**142**[ann.]	°C	ISO 75-1/-2
Vicat softening temperature, B	**146**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**70**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**0.7**	mm	-
Burning behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**2.5**	mm	-
Oxygen index	**40**	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**1**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (2)	**2**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (3)	**3**	mm	-
Glow Wire Ignition Temperature (GWIT)	**850**	°C	IEC 60695-2-13
GWIT - thickness tested (1)	**1**	mm	-
Glow Wire Ignition Temperature (GWIT)	**850**	°C	IEC 60695-2-13
GWIT - thickness tested (2)	**2**	mm	-
Glow Wire Ignition Temperature (GWIT)	**850**	°C	IEC 60695-2-13
GWIT - thickness tested (3)	**3**	mm	-

ann.: annealed

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	**1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**1E15**	Ohm	IEC 62631-3-2
Electric strength	**17**	kV/mm	IEC 60243-1
Comparative tracking index	**225**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Density	**1200**	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	**260 - 300**	°C	-
Mold temperature	**70 - 100**	°C	-

Characteristics

Processing
Injection Molding

Additives
Release agent

Special Characteristics
Flame retardant, Phosphorus-free, U.V. stabilized or stable to weather, Heat stabilized or stable to heat, Opaque

Applications
Electrical and Electronical

Regional Availability
North America, Europe, Near East/Africa