EMERGE™ PC/ABS 7700 NA

(PC+ABS) Trinseo

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**13**	g/10min	ISO 1133
Temperature	**260**	°C	-
Load	**2.16**	kg	-
Molding shrinkage, parallel	**0.5**	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	**11**	g/10min	ASTM D 1238
Temperature	**230**	°C	-
Load	**3.8**	kg	-
Mold Shrinkage, MD	**0.005**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2560**	MPa	ISO 527
Yield stress	**55**	MPa	ISO 527
Yield strain	**3.8**	%	ISO 527
Stress at break	**45**	MPa	ISO 527
Strain at break	**43**	%	ISO 527
Charpy notched impact strength, +23°C	**40**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**15**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**50**	kJ/m²	ISO 180/1A
Izod notched impact strength	**14**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
ASTM Data			
Tensile Modulus	**2620**	MPa	ASTM D 638
Tensile Strength at Yield	**60**	MPa	ASTM D 638
Tensile Strength at Break	**48.3**	MPa	ASTM D 638
Elongation at Yield	**3.8**	%	ASTM D 638
Elongation at Break	**65**	%	ASTM D 638
Flexural Modulus	**2690**	MPa	ASTM D 790
Flexural Strength	**96.5**	MPa	ASTM D 790
Rockwell Hardness	**R 120**	-	ASTM D 785
Izod Impact notched, 1/8 in	**480**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**200**	J/m	ASTM D 256
Temperature	**-18**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**77**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**88**	°C	ISO 75-1/-2
Vicat softening temperature, A	**104**	°C	ISO 306
Vicat softening temperature, B	**94**	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Burning behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**2.5**	mm	-
Glow Wire Flammability Index (GWFI)	**925**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**1.5**	mm	-
Glow Wire Flammability Index (GWFI)	**925**	°C	IEC 60695-2-12
GWFI - thickness tested (2)	**2**	mm	-
Glow Wire Flammability Index (GWFI)	**925**	°C	IEC 60695-2-12
GWFI - thickness tested (3)	**2.5**	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	**68**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**68**	E-6/K	ASTM D 696
DTUL @ 66 psi	**90.6**	°C	ASTM D 648
DTUL @ 264 psi	**79.4**	°C	ASTM D 648
Vicat Temperature	**104**	°C	ASTM D 1525

Limiting Oxygen Index	**28**	%	ASTM D 2863

Electrical properties	**Value**	**Unit**	**Test Standard**
ISO Data			
Relative permittivity, 100Hz	**2.86**	-	IEC 62631-2-1
Relative permittivity, 1MHz	**2.8**	-	IEC 62631-2-1
Dissipation factor, 100Hz	**40**	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	**70**	E-4	IEC 62631-2-1
Volume resistivity	**1E16**	Ohm*m	IEC 62631-3-1
Surface resistivity	**5.2E15**	Ohm	IEC 62631-3-2
Electric strength	**26**	kV/mm	IEC 60243-1

Other properties	**Value**	**Unit**	**Test Standard**
Density	**1180**	kg/m³	ISO 1183
Density	**1170**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	**Value**	**Unit**	**Test Standard**
Pre-drying - Temperature	**82 - 88**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Melt temperature	**238 - 274**	°C	-
Mold temperature	**60 - 91**	°C	-

Characteristics

Processing
Injection Molding

Applications
IT / Business Machine, Electrical and Electronical

Special Characteristics
Flame retardant, U.V. stabilized or stable to weather

Regional Availability
North America