

EMERGE™ PC/ABS 7710 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	-
Mechanical properties			
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/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	15	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	50	kJ/m ²	ISO 180/1A
Izod notched impact strength	14	kJ/m ²	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
Rockwell Hardness	R 120	-	ASTM D 785
Izod Impact notched, 1/8 in	480	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	440	J/m	ASTM D 256
Temperature	-22	°C	-
Thermal properties			
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

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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/m ³	ISO 1183
Density	1170	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	230 - 270	°C	-
Mold temperature	60 - 90	°C	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, High impact or impact modified

Applications

IT / Business Machine, Electrical and Electronical

Regional Availability

North America