

Product Texts

Terluran® HI-10 is a medium flow, injection molding grade with very high resistance to impact with excellent heat distortion and suitable for injection molding and extrusion.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	5.5	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
^[C] Density of melt	896	kg/m ³	-
^[C] Thermal conductivity of melt	0.16	W/(m K)	-
^[C] Spec. heat capacity of melt	2400	J/(kg K)	-
^[C] Ejection temperature	102	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1900	MPa	ISO 527
^[C] Yield stress	38	MPa	ISO 527
^[C] Yield strain	2.8	%	ISO 527
^[C] Nominal strain at break	9	%	ISO 527
^[C] Charpy impact strength, -30°C	140	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	35	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	13	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	93	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	97	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	90	°C	ISO 306
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	2.9	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	2.8	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	54	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	82	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E13	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	1.03	%	Sim. to ISO 62
^[C] Humidity absorption	0.21	%	Sim. to ISO 62
^[C] Density	1030	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-

Melt temperature	230 - 260	°C	-
Mold temperature	30 - 60	°C	-

Characteristics**Processing**

Injection Molding, Profile Extrusion, Sheet Extrusion, Other Extrusion

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Delivery form

Pellets

Other text information**Injection molding**

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

PROCESSING

Melt temperature, range: 220 - 260°C

Mold temperature, range: 30 - 80°C

Other extrusion

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

PROCESSING

Pipes, Melt temperature: 200 - 230°C

Profile extrusion

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

PROCESSING

Profiles, Melt temperature: 230°C

Sheet extrusion

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

PROCESSING

Plates, Melt temperature: 210 - 240°C