

Terluran® HI-10

Acrylonitrile Butadiene Styrene

BASF Corporation

Product Description

Terluran HI-10 is an injection molding and extrusion grade of ABS with very high toughness and medium flow.

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Additive	• Impact Modifier		
Features	• Impact Modified	• Medium Flow	• Ultra High Toughness
Agency Ratings	• FDA Unspecified Rating	• NSF 51	• ULC Unspecified Rating
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion • Injection Molding	• Profile Extrusion • Sheet Extrusion	
Multi-Point Data	• Creep Modulus vs. Time (ISO 11403-1) • Isochronous Stress vs. Strain (ISO 11403-1)	• Isothermal Stress vs. Strain (ISO 11403-1) • Secant Modulus vs. Strain (ISO 11403-1)	• Specific Volume vs Temperature (ISO 11403-2) • Viscosity vs. Shear Rate (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.03	g/cm ³	ASTM D792
--	1030	kg/m ³	ISO 1183 ²
Melt Volume-Flow Rate (MVR)			
200°C/5.0 kg	0.100	cm ³ /10min	ASTM D1238
220°C/10.0 kg	8.00	cm ³ /10min	ASTM D1238 ISO 1133 ²
230°C/3.8 kg	1.70	cm ³ /10min	ASTM D1238
Molding Shrinkage - Flow	0.55	%	ASTM D955
Water Absorption (Saturation, 23°C)	1.0	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
23°C	2000	MPa	ASTM D638
--	1900	MPa	ISO 527-2 ²
Tensile Strength			
Yield, 23°C	43.0	MPa	ASTM D638
Yield	38.0	MPa	ISO 527-2 ²
Break ³	33.0	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C ³	3.5	%	ASTM D638
Yield	2.8	%	ISO 527-2 ²
Nominal strain at break	9.0	%	ISO 527-2 ²
Flexural Modulus (23°C)	2050	MPa	ASTM D790
Flexural Strength			
23°C	66.0	MPa	ASTM D790
23°C	56.0	MPa	ISO 178

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Friday, December 25, 2009

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength			ISO 179/1eA ²
-30°C	13.0	kJ/m ²	
23°C	35.0	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-30°C	140	kJ/m ²	
23°C	No Break		
Notched Izod Impact			ASTM D256
-30°C	120	J/m	
-18°C	180	J/m	
23°C	450	J/m	
Unnotched Izod Impact Strength (23°C)	36.0	kJ/m ²	ISO 180
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	95		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	94.0	°C	ASTM D648
0.45 MPa, Annealed	102	°C	ASTM D648
0.45 MPa	101	°C	ISO 75-2 ²
1.8 MPa, Unannealed	86.0	°C	ASTM D648
1.8 MPa, Annealed	98.0	°C	ASTM D648
1.8 MPa	96.0	°C	ISO 75-2 ²
Vicat Softening Temperature			
--	94.0	°C	ASTM D1525 ⁴
50°C/h, B (50N)	94.0	°C	ISO 306 ²
CLTE - Flow	0.000095	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity			
--	> 1.0E+13	ohm·cm	ASTM D257
--	> 1.0E+11	ohm·m	IEC 60093 ²
Dielectric Constant			
1.00 mm, 1 MHz	2.80		ASTM D150
100 Hz	2.90		IEC 60250 ²
1 MHz	2.80		IEC 60250 ²
Dissipation Factor			IEC 60250 ²
100 Hz	54		
1 MHz	82		
Comparative tracking index	600		IEC 60112 ²
Electric Strength (1.50 mm)	40	kV/mm	IEC 60243-1
Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.50 mm)	HB		UL 94
UL 746	Nominal Value	Unit	Test Method
RTI Str (1.50 mm)	90.0	°C	UL 746
RTI Imp (1.50 mm)	80.0	°C	UL 746
RTI Elec (1.50 mm)	90.0	°C	UL 746

Notes

¹ Typical properties: these are not to be construed as specifications.

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

³ 51 mm/min

⁴ Rate A (50°C/h), Loading 2 (50 N)

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

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