Terluran® GP-22

BASF Corporation - *Acrylonitrile Butadiene Styrene*

Product Description

Terluran GP-22 is an easy flowing grade of ABS for injection molding with high resistance to impact and heat deflection.

Product Characteristics

Material Status	• Commercial: Active
Availability	• North America • Europe
Test Standards Available	• ASTM • ISO 10350
Recycled Content	• No
Features	• Copolymer • General Purpose • Flow, Good • Impact Resistance, High
Uses	• Telecommunications • Automotive Applications • Housings • General Purpose
Automotive Specifications	• FORD ESF-M4D241-B • GM GMP.ABS.001 • FORD WSK-M4D827-A • FORD ESF-M4D236-A • CHRYSLER MSDB 200 CPN4030
Forms	• Pellets
Processing Method	• Injection Molding
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) • Shear Modulus vs. Temperature (ISO 11403-2) • Specific Volume vs Temperature (ISO 11403-2) • Viscosity vs. Shear Rate (ISO 11403-2)

Properties [1]

Physical	Nominal Values (English)		Test Method
Density	1.04	g/cm³	ASTM D1505

Mechanical	Nominal Values (English)		Test Method
Tensile Modulus [2]	341000	psi	ASTM D638
Tensile Strength @ Yield [3]	6530	psi	ASTM D638
Tensile Strength @ Break [3]	4930	psi	ASTM D638
Tensile Elongation @ Yld	2.6	%	ASTM D638
Flexural Modulus	334000	psi	ASTM D790
Flexural Strength [4]	9430	psi	ASTM D790

Impact	Nominal Values (English)		Test Method
Notched Izod Impact			ASTM D256
(-40 °F, 0.125 in)	1.12	ft-lb/in	
(0 °F, 0.125 in)	1.87	ft-lb/in	
(73 °F, 0.125 in)	5.62	ft-lb/in	

Hardness	Nominal Values (English)		Test Method
Rockwell Hardness (R-Scale)	103		ASTM D785

Thermal	Nominal Values (English)		Test Method
DTUL @264psi - Annealed (0.250 in)	210	°F	ASTM D648
DTUL @264psi - Unannealed (0.250 in)	172	°F	ASTM D648
DTUL @66psi - Annealed (0.250 in)	219	°F	ASTM D648
DTUL @66psi - Unannealed (0.250 in)	196	°F	ASTM D648
Vicat Softening Point (Rate A)	207	°F	ASTM D1525

Ignition Characteristics	Nominal Values (English)	Test Method
Flame Rating - UL		UL 94
(0.0590 in, ALL)	HB	
(0.118 in, ALL)	HB	
(0.0310 in, ALL)	HB	

UL 746	Nominal Values (English)	Test Method
Rel Temp Indx Mech w/oImp		UL 746
(0.0590 in)	203 °F	
(0.118 in)	203 °F	
(0.0310 in)	203 °F	
Rel Temp Indx Mech w/Imp		UL 746
(0.0310 in)	176 °F	
(0.0590 in)	176 °F	
(0.118 in)	176 °F	
Rel Temp Indx Elect		UL 746
(0.0310 in)	194 °F	
(0.0590 in)	194 °F	
(0.118 in)	194 °F	

Additional Properties

Melt Flow Index, ASTM D1238, 220°C/10 kg: 19.6 g/10 min
Melt Flow Index, ASTM D1238, 230°C/3.8 kg: 4.7 g/10 min

Processing Information

Injection Molding Parameters	Nominal Values (English)	Test Method
Drying Temperature	176 °F	
Drying Time	2.0 to 4.0 hr	
Suggested Max Regrind	20 %	
Processing (Melt) Temp	428 to 500 °F	
Mold Temperature	86.0 to 140 °F	

Notes

[1] Typical properties; not to be construed as specifications.
[2] 0.125 in
[3] Type I, 0.125 in
[4] 0.125 in