

Styrolution Terluran® GP-22 ABS

Category : Polymer , Thermoplastic , ABS Polymer , Acrylonitrile Butadiene Styrene (ABS), Impact Grade, Molded

Material Notes:

Terluran GP-22 is an easy flowing grade of ABS for injection molding with high resistance to impact and heat deflection. Information provided by STYROLUTION, which is a joint venture between BASF and INEOS.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Styrolution-Terluran-GP-22-ABS.php

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in ³	ISO 1183
Water Absorption	1.0 %	1.0 %	ISO 62
Moisture Absorption at Equilibrium	0.22 %	0.22 %	23°C/50% R.H.; ISO 62
Linear Mold Shrinkage	0.0055 cm/cm	0.0055 in/in	ASTM Data; MD
Melt Flow	1.5 g/10 min	1.5 g/10 min	ASTM Test
	@Load 5.00 kg, Temperature 200 °C	@Load 11.0 lb, Temperature 392 °F	
	4.8 g/10 min	4.8 g/10 min	ASTM Test
	@Load 3.80 kg, Temperature 230 °C	@Load 8.38 lb, Temperature 446 °F	
	19 g/10 min	19 g/10 min	ISO 1133
	@Load 10.0 kg, Temperature 220 °C	@Load 22.0 lb, Temperature 428 °F	
	19 g/10 min	19 g/10 min	ASTM Test
	@Load 10.0 kg, Temperature 220 °C	@Load 22.0 lb, Temperature 428 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	103	103	ASTM Test
Tensile Strength, Yield	45.0 MPa	6530 psi	50mm/min; ISO 527
	45.0 MPa	6530 psi	2 in/min; ASTM Test
	19.0 MPa	2760 psi	ISO Data
	@Temperature 80.0 °C	@Temperature 176 °F	
	63.0 MPa	9140 psi	ISO Data
	@Temperature -40.0	@Temperature -40.0	

Mechanical Properties	°C Metric	°F English	Comments
Elongation at Break	10 %	10 %	50mm/min, Nominal strain; ISO 527
Elongation at Yield	2.6 %	2.6 %	50mm/min; ISO 527
	2.6 %	2.6 %	2 in/min; ASTM Test
	2.4 % @Temperature 80.0 °C	2.4 % @Temperature 176 °F	ISO Data
	3.6 % @Temperature -40.0 °C	3.6 % @Temperature -40.0 °F	ISO Data
Tensile Modulus	2.30 GPa	334 ksi	1mm/min; ISO 527
	2.30 GPa	334 ksi	ASTM Test
Flexural Strength	65.0 MPa	9430 psi	ISO Data
	65.0 MPa	9430 psi	ASTM Test
Flexural Modulus	2.30 GPa	334 ksi	ASTM Test
Izod Impact, Notched	0.600 J/cm @Temperature -30.0 °C	1.12 ft-lb/in @Temperature -22.0 °F	ASTM Test
	1.00 J/cm @Temperature -18.0 °C	1.87 ft-lb/in @Temperature -0.400 °F	ASTM Test
	3.00 J/cm @Thickness 3.17 mm	5.62 ft-lb/in @Thickness 0.125 in	ASTM Test
Izod Impact, Notched (ISO)	26.0 kJ/m ²	12.4 ft-lb/in ²	ISO Test
Charpy Impact Unnotched	18.0 J/cm ²	85.7 ft-lb/in ²	ISO 179
	10.0 J/cm ² @Temperature -30.0 °C	47.6 ft-lb/in ² @Temperature -22.0 °F	ISO 179
Charpy Impact, Notched	2.20 J/cm ²	10.5 ft-lb/in ²	ISO 179
	0.800 J/cm ² @Temperature -30.0 °C	3.81 ft-lb/in ² @Temperature -22.0 °F	ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	95.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	52.8 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ISO 11359
Deflection Temperature at 0.46 MPa (66 psi)	91.0 $^\circ\text{C}$	196 $^\circ\text{F}$	ASTM Test
	103 $^\circ\text{C}$	217 $^\circ\text{F}$	ISO 75
	104 $^\circ\text{C}$	219 $^\circ\text{F}$	annealed; ASTM Test
Deflection Temperature at 1.8 MPa (264 psi)	78.0 $^\circ\text{C}$	172 $^\circ\text{F}$	ASTM Test
	99.0 $^\circ\text{C}$	210 $^\circ\text{F}$	ISO 75
	99.0 $^\circ\text{C}$	210 $^\circ\text{F}$	annealed; ASTM Test
Vicat Softening Point	96.0 $^\circ\text{C}$	205 $^\circ\text{F}$	Rate "A" Loading 2 (50 degC/h 50N); ASTM Test
	96.0 $^\circ\text{C}$	205 $^\circ\text{F}$	(50 $^\circ\text{C}/\text{h}$ / 50N) - B/50; ISO 306
Flammability, UL94	HB	HB	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	
	@Thickness 0.800 mm	@Thickness 0.0315 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+13 \text{ ohm}\cdot\text{cm}$	$\geq 1.00\text{e}+13 \text{ ohm}\cdot\text{cm}$	IEC 60093
Dielectric Constant	2.8	2.8	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	2.9	2.9	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	37.0 kV/mm	940 kV/in	IEC 60243-1
Dissipation Factor	0.0048	0.0048	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.0079	0.0079	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 V	IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	250 Â°C	482 Â°F	Injection molding
Mold Temperature	100 Â°C	212 Â°F	Ejection temperature
Injection Velocity	60.0 mm/sec	2.36 in/sec	Injection molding

Descriptive Properties	Value	Comments
Color	Natural	
Commercial Status	North America and Europe	
FDA	Yes	
Form	Pellets	
Impact Modified	Yes	
NSF Std. 14	Yes	
NSF Std. 51	Yes	
NSF Std. 61	Yes	
Primary Processing Technique	Injection Molding	
Processing	Injection Molding	
Special characteristic	Lubricant	
	Platable	
UL.UL-C	Yes	
USP Class VI	No	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China