

**Technical Data**

**Product Description**

Terluran® GP-22 is an easy-flow, general purpose injection molding grade with high resistance to impact and heat distortion; intended for a wide range of applications, particularly in the housings sector.

**FEATURES**

- Excellent colorability
- Medium flow
- Good impact resistance
- Good heat distortion resistance
- High quality surface finish and gloss
- Great mechanical strength and rigidity

**APPLICATIONS**

- Injection molding
- Appliance housings
- Household and sanitary appliances
- Toys
- Automotive components
- Consumer products

**General**

Material Status	• Commercial: Active		
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>		
Search for UL Yellow Card	• <a href="#">INEOS Styrolution</a> • <a href="#">Terluran®</a>		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose • Good Colorability • Good Impact Resistance	• Good Rigidity • Good Surface Finish • High Gloss	• Medium Flow
Uses	• Appliances • Automotive Applications • Consumer Applications	• Household Goods • Housings • Sanitary Products	• Toys
Forms	• Pellets		
Processing Method	• Injection Molding		
Multi-Point Data	• Creep Modulus vs. Time (ISO 11403) • Isochronous Stress vs. Strain (ISO 11403) • Isothermal Stress vs. Strain (ISO 11403)	• Secant Modulus vs. Strain (ISO 11403) • Shear Modulus vs. Temperature (ISO 11403) • Specific Volume vs Temperature (ISO 11403)	• Viscosity vs. Shear Rate (ISO 11403)

Physical	Nominal Value Unit	Test Method
Density	1.04 g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	19 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage	0.40 to 0.70 %	ISO 294-4
Water Absorption		ISO 62
Saturation, 23°C	1.0 %	
Equilibrium, 23°C, 50% RH	0.22 %	



Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2300 MPa	ISO 527-1
Tensile Stress (Yield, 23°C)	45.0 MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	2.6 %	ISO 527-2
Nominal Tensile Strain at Break (23°C)	10 %	ISO 527-2
Flexural Stress (23°C)	65.0 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	8.0 kJ/m <sup>2</sup>	
23°C	22 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength		ISO 179/1eU
-30°C	100 kJ/m <sup>2</sup>	
23°C	180 kJ/m <sup>2</sup>	
Notched Izod Impact Strength		ISO 180/A
-30°C	8.0 kJ/m <sup>2</sup>	
23°C	26 kJ/m <sup>2</sup>	
Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness	97.0 MPa	ISO 2039-1
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load <sup>3</sup>		
0.45 MPa, Annealed	99.0 °C	ISO 75-2/B
1.8 MPa, Annealed	94.0 °C	ISO 75-2/A
Vicat Softening Temperature		
--	96.0 °C	ISO 306/B50
--	105 °C	ISO 306/A50
CLTE - Flow	8.0E-5 to 1.1E-4 cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.17 W/m/K	DIN 52612
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	> 1.0E+14 ohms	IEC 62631-3-1
Volume Resistivity	> 1.0E+14 ohms·cm	IEC 62631-3-1
Relative Permittivity		IEC 62631-2-1
100 Hz	2.90	
1 MHz	2.80	
Dissipation Factor		IEC 62631-2-1
100 Hz	4.8E-3	
1 MHz	7.9E-3	
Optical	Nominal Value Unit	Test Method
Yellowness Index	13 YI	DIN 6167
Injection	Nominal Value Unit	
Drying Temperature	80 °C	
Drying Time	2.0 to 4.0 hr	
Processing (Melt) Temp	220 to 260 °C	
Mold Temperature	30 to 80 °C	
Injection Velocity	12 m/min	



### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 4 h/80 °C

