



Terluran® GP-22

INEOS Styrolution - Acrylonitrile Butadiene Styrene

Thursday, January 23, 2025

General Information

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		
Regional 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

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General

Automotive Specifications	<ul style="list-style-type: none"> • BMW GS 93016 • CHRYSLER MS-DB-200 CPN4030 Color: Color As Noted On Drawing • DAIMLER DBL 5404 • FORD ESB-M4D483-A1 • FORD WSK-M4D827-A Color: Black • FORD WSK-M4D864-A3 • FORD WSS-M4D483-C1 • FORD WSS-M4D483-D1 • FORD WSS-M4D827-A3 • GM GMP.ABS.001 • GM GMP.ABS.002 • GM GMP.ABS.004 • GM GMW15572P-ABS-T1 • GM QK 002012 Color: Natural • PSA Peugeot-Citroën SPA X62 2108 • TOYOTA TSM 5512G • VOLKSWAGEN TL 527
Forms	<ul style="list-style-type: none"> • Pellets
Processing Method	<ul style="list-style-type: none"> • Injection Molding

ASTM & ISO Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.04 g/cm ³	1.04 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	19 cm ³ /10min	19 cm ³ /10min	ISO 1133
Molding Shrinkage	0.40 to 0.70 %	0.40 to 0.70 %	ISO 294-4
Water Absorption			ISO 62
Saturation, 73°F (23°C)	1.0 %	1.0 %	
Equilibrium, 73°F (23°C), 50% RH	0.22 %	0.22 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1
Tensile Stress (Yield, 73°F (23°C))	6530 psi	45.0 MPa	ISO 527-2
Tensile Strain (Yield, 73°F (23°C))	2.6 %	2.6 %	ISO 527-2
Nominal Tensile Strain at Break			ISO 527-2
73°F (23°C)	10 %	10 %	
Flexural Stress (73°F (23°C))	9430 psi	65.0 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
73°F (23°C)	10 ft·lb/in ²	22 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	48 ft·lb/in ²	100 kJ/m ²	
73°F (23°C)	86 ft·lb/in ²	180 kJ/m ²	
Notched Izod Impact Strength			ISO 180/A
-22°F (-30°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
73°F (23°C)	12 ft·lb/in ²	26 kJ/m ²	

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Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Ball Indentation Hardness	14100 psi	97.0 MPa	ISO 2039-1
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load ²			
66 psi (0.45 MPa), Annealed	210 °F	99.0 °C	ISO 75-2/B
264 psi (1.8 MPa), Annealed	201 °F	94.0 °C	ISO 75-2/A
Vicat Softening Temperature			
--	205 °F	96.0 °C	ISO 306/B50
--	221 °F	105 °C	ISO 306/A50
CLTE - Flow	4.4E-5 to 6.1E-5 in/in/°F	8.0E-5 to 1.1E-4 cm/cm/°C	ISO 11359-2
Thermal Conductivity	1.2 Btu·in/hr/ft ² /°F	0.17 W/m/K	DIN 52612
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	> 1.0E+14 ohms	> 1.0E+14 ohms	IEC 62631-3-1
Volume Resistivity	> 1.0E+14 ohms·cm	> 1.0E+14 ohms·cm	IEC 62631-3-1
Relative Permittivity			IEC 62631-2-1
100 Hz	2.90	2.90	
1 MHz	2.80	2.80	
Dissipation Factor			IEC 62631-2-1
100 Hz	4.8E-3	4.8E-3	
1 MHz	7.9E-3	7.9E-3	
Optical	Typical Value (English)	Typical Value (SI)	Test Method
Yellowness Index	13 YI	13 YI	DIN 6167

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	428 to 500 °F	220 to 260 °C
Mold Temperature	86 to 176 °F	30 to 80 °C
Injection Velocity	472 in/min	12 m/min

Notes

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

² 4 h/80 °C

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