INEOS STYROLUTION

Terluran GP-22

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

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

APPLICATIONS

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

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	19
Mechanical Properties			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	26
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m²	8
Charpy Notched Impact Strength, 23° C	ISO 179	kJ/m²	22
Charpy Notched Impact Strength, -30° C	ISO 179	kJ/m²	8
Charpy Unnotched, 23° C	ISO 179	kJ/m²	180
Charpy Unnotched, -30° C	ISO 179	kJ/m²	100
Tensile Stress at Yield, 23° C	ISO 527	MPa	45
Tensile Strain at Yield, 23° C	ISO 527	%	2.6
Tensile Modulus	ISO 527	MPa	2300
Nominal Strain at Break, 23 °C	ISO 527	%	10
Flexural Strength	ISO 178	MPa	65
Hardness, Ball Indentation	ISO 2039-1	MPa	97
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50°C/h)	ISO 306	°C	96

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Vicat Softening Temperature, VST/A/50 (10N, 50°C/h)	ISO 306	°C	105
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	94
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	99
Coefficient of Linear Thermal Expansion	ISO 11359	10^(-6)/°C	80 - 110
Thermal Conductivity	DIN 52612-1	W/(m K)	0.17
Electrical Properties			
Dissipation Factor (100 Hz)	IEC 60250	10^(-4)	48
Dissipation Factor (1 MHz)	IEC 60250	10^(-4)	79
Relative Permittivity (100 Hz)	IEC 60250	-	2.9
Relative Permittivity (1 MHz)	IEC 60250	-	2.8
Volume Resistivity	IEC 60093	Ohm*m	1E13
Surface Resistivity	IEC 60093	Ohm	1E13
Other Properties			
Density	ISO 1183	kg/m³	1040
Water Absorption, Saturated at 23°C	ISO 62	%	1
Moisture Absorption, Equilibrium 23°C/50% RH	ISO 62	%	0.22
Yellowness Index	DIN 6167	-	13
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
Melt Temperature Range	ISO 294	°C	220 - 260
Mold Temperature Range	ISO 294	°C	30 - 80
Injection Velocity	ISO 294	mm/s	200
Drying Temperature		°C	80
Drying Time		h	2 - 4