

CAMPUS® Datasheet

Terluran® GP-22 - ABS
Styrolution



Product Texts

Easy-flow, general purpose injection moulding grade with high resistance to impact and heat distortion; intended for a wide range of applications, particularly in the housings sector.

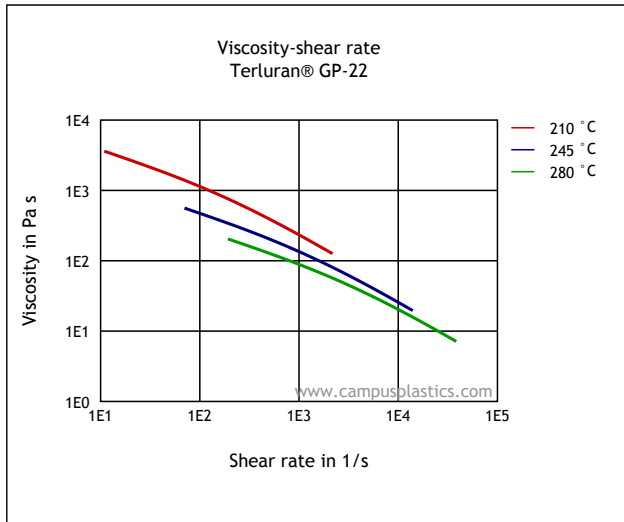
Rheological properties	Value	Unit	Test Standard
Melt volume-flow rate, MVR	19	cm ³ /10min	ISO 1133
Temperature	220	°C	ISO 1133
Load	10	kg	ISO 1133
Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	2300	MPa	ISO 527-1/-2
Yield stress	45	MPa	ISO 527-1/-2
Yield strain	2.6	%	ISO 527-1/-2
Nominal strain at break	10	%	ISO 527-1/-2
Charpy impact strength, +23°C	180	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	100	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	22	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Temp. of deflection under load, 1.80 MPa	80	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	92	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	96	°C	ISO 306
Coeff. of linear therm. expansion, parallel	95	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
UL recognition	UL	-	-
Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	IEC 60695-11-10
Electrical properties	Value	Unit	Test Standard
Relative permittivity, 100Hz	2.9	-	IEC 60250
Relative permittivity, 1MHz	2.8	-	IEC 60250
Dissipation factor, 100Hz	48	E-4	IEC 60250
Dissipation factor, 1MHz	79	E-4	IEC 60250
Volume resistivity	1E13	Ohm*m	IEC 60093
Surface resistivity	1E13	Ohm	IEC 60093
Electric strength	41	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
Other properties	Value	Unit	Test Standard
Water absorption	1	%	Sim. to ISO 62
Humidity absorption	0.22	%	Sim. to ISO 62
Density	1040	kg/m ³	ISO 1183
Rheological calculation properties	Value	Unit	Test Standard
Density of melt	930	kg/m ³	-
Thermal conductivity of melt	0.16	W/(m K)	-
Spec. heat capacity of melt	2400	J/(kg K)	-
Ejection temperature	93	°C	-

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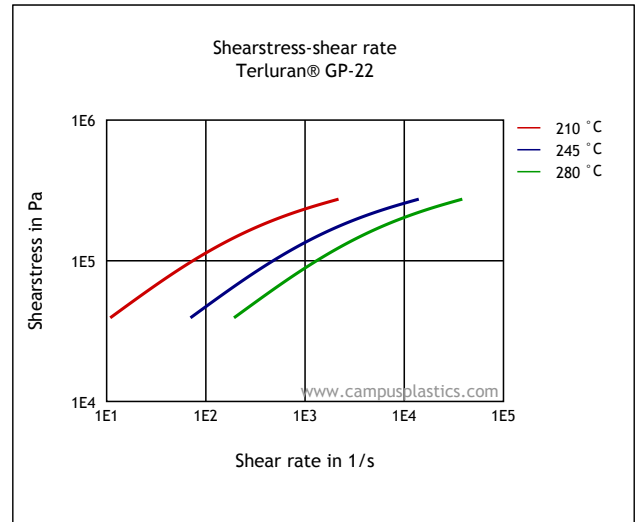
Test specimen production	Value	Unit	Test Standard
Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 10724
Injection Molding, injection velocity	200	mm/s	ISO 294

Diagrams

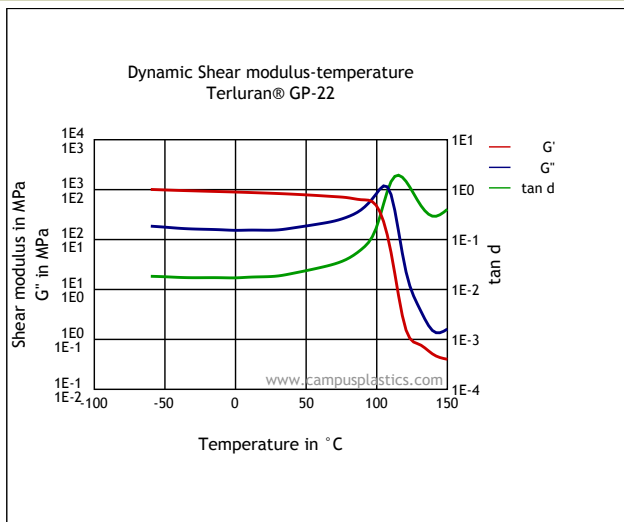
Viscosity-shear rate



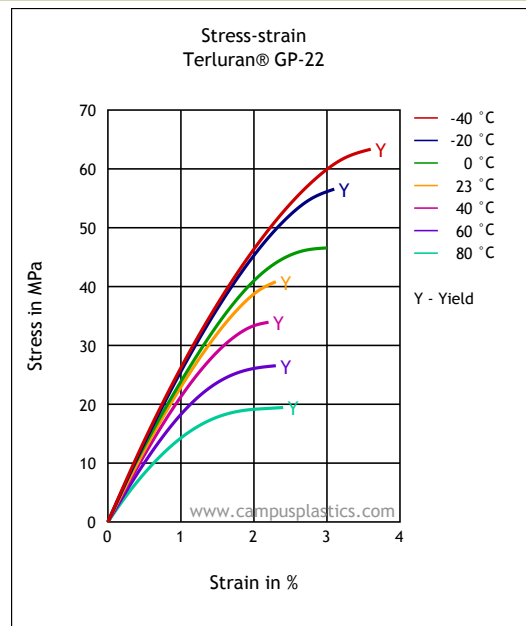
Shearstress-shear rate



Dynamic Shear modulus-temperature

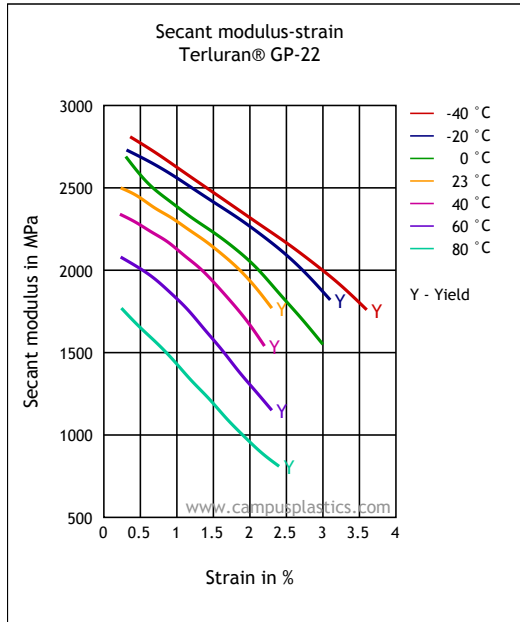


Stress-strain

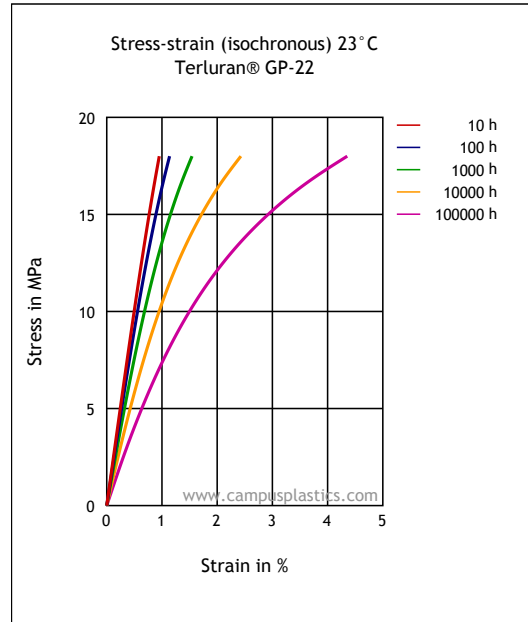


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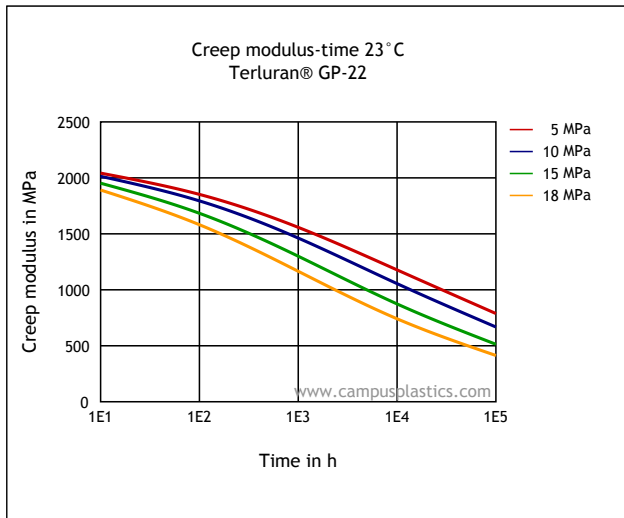
Secant modulus-strain



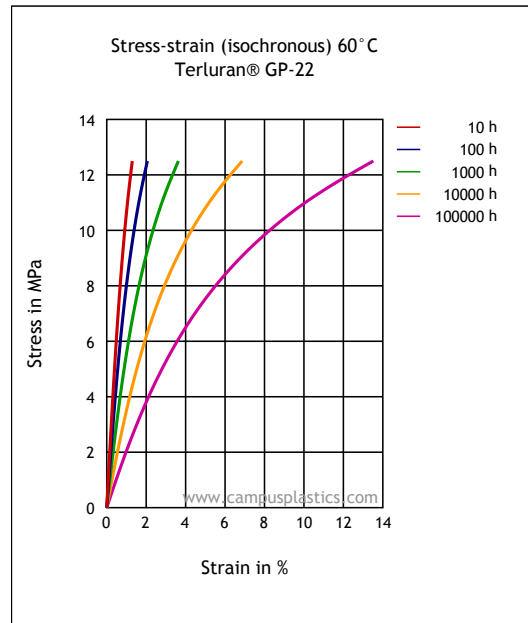
Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C

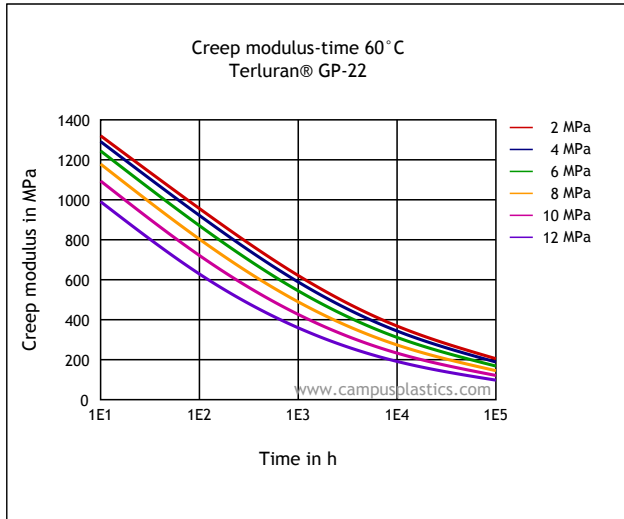


Stress-strain (isochronous) 60 °C

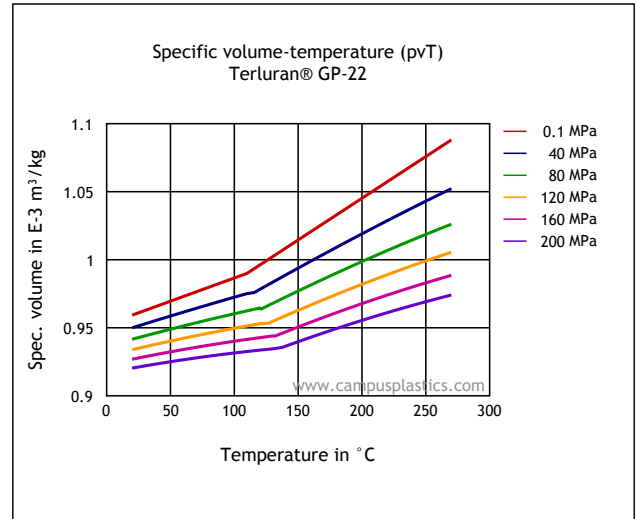


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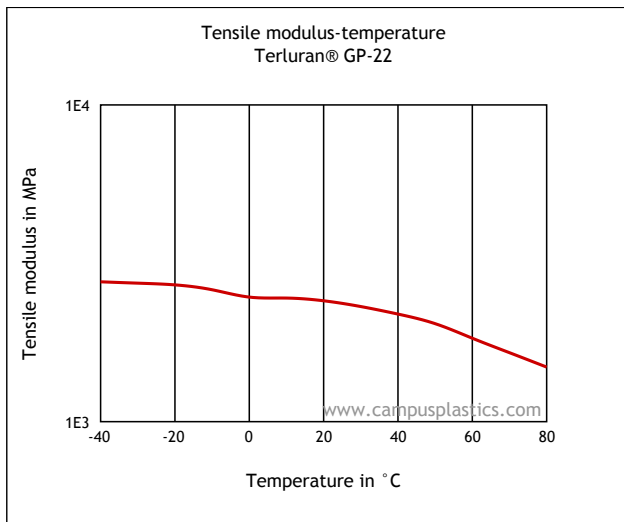
Creep modulus-time 60 °C



Specific volume-temperature (pvT)



Tensile modulus-temperature



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Anti-static, Platable

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

PREPROCESSING

Pre/Post-processing, Pre-drying, Temperature: 80 °C

Pre/Post-processing, Pre-drying, Time: 2 - 4 h

PROCESSING

injection molding, Melt temperature, range: 220 - 260 °C

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injection molding, Melt temperature, recommended: 250 °C
injection molding, Mold temperature, range: 30 - 60 °C
injection molding, Mold temperature, recommended: 50 °C

Chemical Media Resistance

Acids

 Nitric Acid (40% by mass) (23 °C)

Alcohols


 Isopropyl alcohol (23 °C)

Hydrocarbons


 n-Hexane (23 °C)

 Toluene (23 °C)

Ketones

 Acetone (23 °C)

Ethers

 Diethyl ether (23 °C)

Other

 Ethyl Acetate (23 °C)

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