CAMPUS® Datasheet

Terluran® GP-35 - ABS
INEOS Styrolution Europe GmbH

Product Texts			
Easy-flow injection moulding product with good ductility, intended for mouldings with thin walls and/or adverse flow length to wall ratio.			
Rheological properties	**Value**	**Unit**	**Test Standard**
Melt volume-flow rate, MVR	**34**	cm³/10min	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	**44**	MPa	ISO 527-1/-2
Yield strain	**2.4**	%	ISO 527-1/-2
Nominal strain at break	**12**	%	ISO 527-1/-2
Charpy impact strength, +23°C	**125**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**90**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**19**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**7**	kJ/m²	ISO 179/1eA
Thermal properties	**Value**	**Unit**	**Test Standard**
Temp. of deflection under load, 1.80 MPa	**92**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**95**	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	**95**	°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)	**1.5**	mm	IEC 60695-11-10
Yellow Card available	**Yes**	-	-
Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested (h)	**0.8**	mm	IEC 60695-11-10
Electrical properties	**Value**	**Unit**	**Test Standard**
Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**1E13**	Ohm	IEC 62631-3-2
Electric strength	**41**	kV/mm	IEC 60243-1
Other properties	**Value**	**Unit**	**Test Standard**
Water absorption	**0.95**	%	Sim. to ISO 62
Humidity absorption	**0.24**	%	Sim. to ISO 62
Density	**1040**	kg/m³	ISO 1183
Rheological calculation properties	**Value**	**Unit**	**Test Standard**
Density of melt	**930**	kg/m³	-
Thermal conductivity of melt	**0.16**	W/(m K)	-
Spec. heat capacity melt	**2300**	J/(kg K)	-
Ejection temperature	**84**	°C	-
Test specimen production	**Value**	**Unit**	**Test Standard**
Injection Molding, melt temperature	**250**	°C	ISO 294
Injection Molding, mold temperature	**60**	°C	ISO 294
Injection Molding, injection velocity	**200**	mm/s	ISO 294

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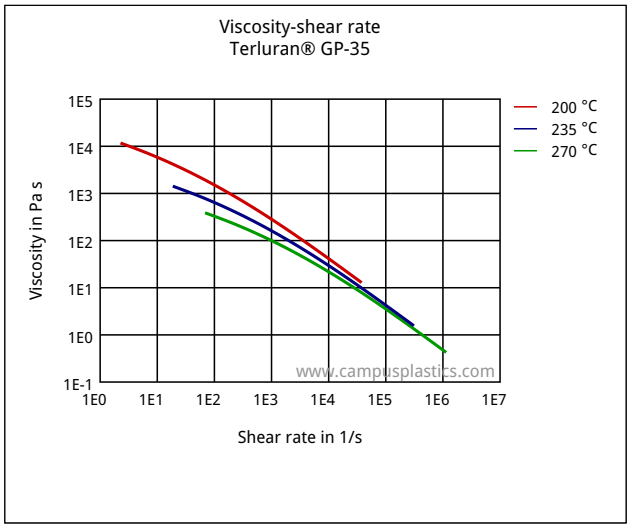
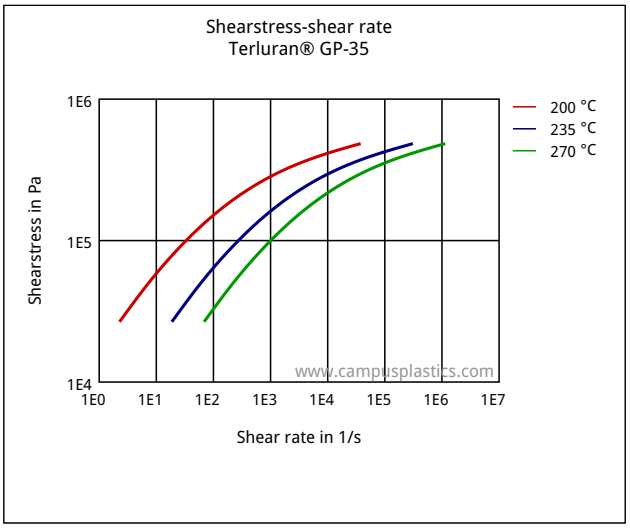
Diagrams

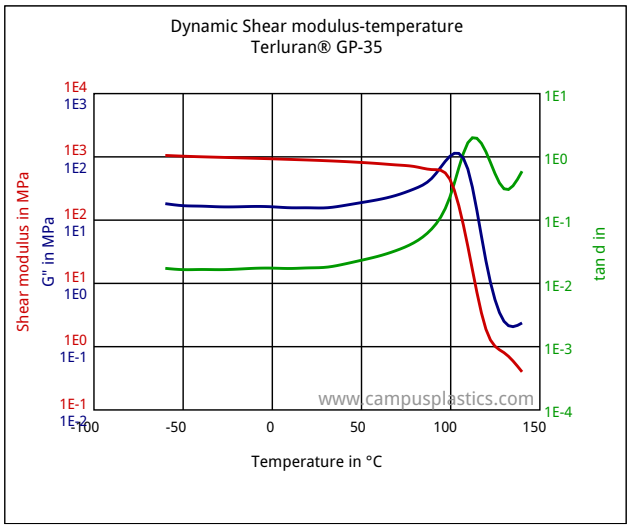
Viscosity-shear rate



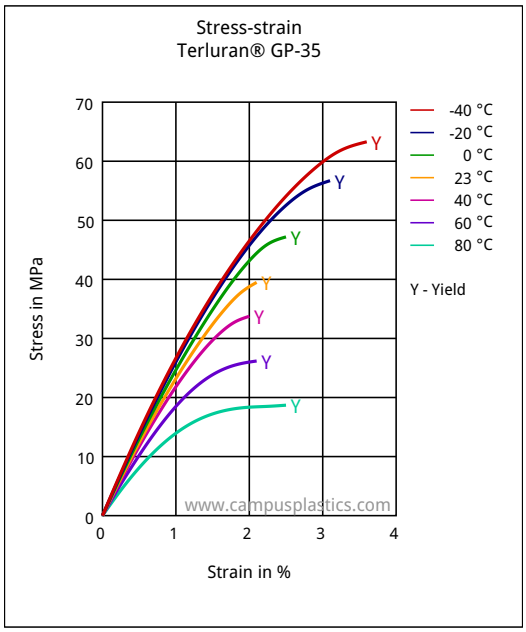
Shearstress-shear rate



Dynamic Shear modulus-temperature



Stress-strain



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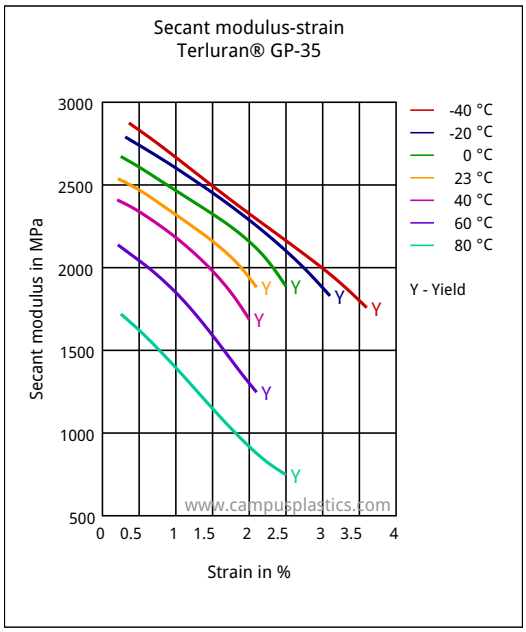
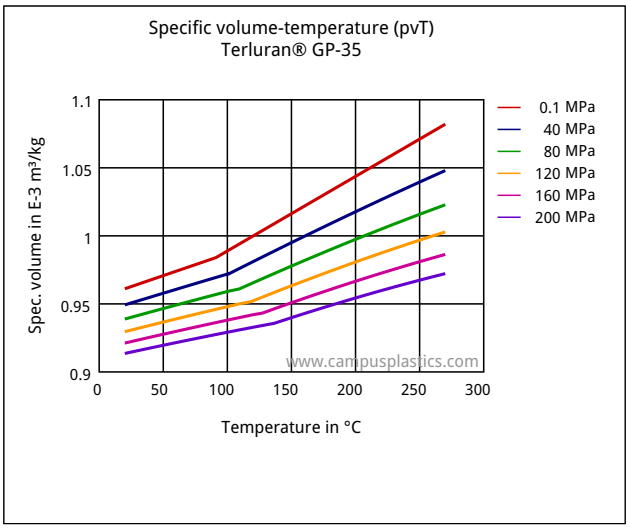
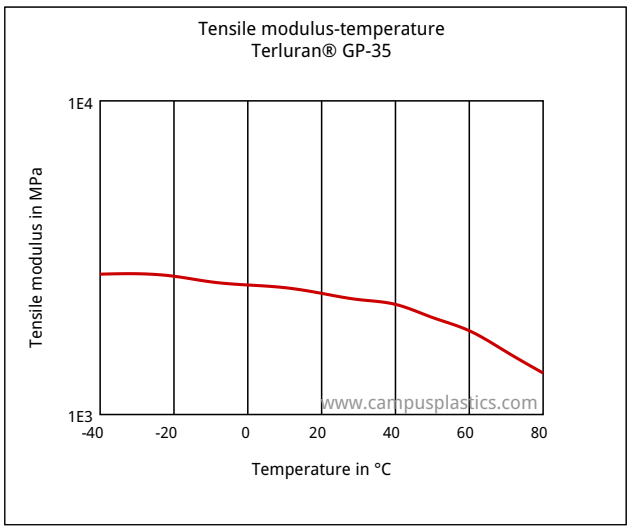
Secant modulus-strain



Specific volume-temperature (pvT)



Tensile modulus-temperature



Characteristics

Processing
Injection Molding

Special Characteristics
Platable

Delivery form
Pellets

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

Additives
Lubricants

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
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

- Acetic Acid (5% by mass) (23°C)
- Citric Acid solution (10% by mass) (23°C)
- Lactic Acid (10% by mass) (23°C)
- Hydrochloric Acid (36% by mass) (23°C)
- Nitric Acid (40% by mass) (23°C)
- Sulfuric Acid (38% by mass) (23°C)
- Sulfuric Acid (5% by mass) (23°C)
- Chromic Acid solution (40% by mass) (23°C)

Bases

- Sodium Hydroxide solution (35% by mass) (23°C)
- Sodium Hydroxide solution (1% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

Alcohols

- Isopropyl alcohol (23°C)
- Methanol (23°C)
- Ethanol (23°C)

Hydrocarbons

- n-Hexane (23°C)
- Toluene (23°C)
- iso-Octane (23°C)

Ketones

- Acetone (23°C)

Ethers

- Diethyl ether (23°C)

Standard Fuels

- Diesel fuel (pref. ISO 1817 Liquid F) (23°C)

Salt solutions

- Sodium Chloride solution (10% by mass) (23°C)
- Sodium Hypochlorite solution (10% by mass) (23°C)
- Sodium Carbonate solution (20% by mass) (23°C)
- Sodium Carbonate solution (2% by mass) (23°C)
- Zinc Chloride solution (50% by mass) (23°C)

Other

- Ethyl Acetate (23°C)
- Hydrogen peroxide (23°C)
- 1% nonylphenoxy-polyethyleneoxy ethanol in water (23°C)
- Water (23°C)

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