+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
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INEOS Styrolution

ALBIS

Luran® 378P G7

SAN-GF35 INEOS Styrolution

Luran® 378P G7 is a glass fiber-reinforced grade (35% GF) of SAN with very high stiffness and low thermal coefficient of linear expansion. It features good chemical and weathering resistance and is suitable for extrusion and injection molding.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	4	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	12000	MPa	ISO 527
Stress at Break	110	MPa	ISO 527
Strain at Break	2	%	ISO 527
Impact Strength (Charpy), +23°C	17	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	17	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	4	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	104	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	108	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	109	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	25	E-6/K	ISO 11359-1/-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Humidity absorption	0.25	%	Sim. to ISO 62
Density	1360	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Thermal Conductivity of Melt	0.21	W/(m K)	-

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	220 - 260	°C	-
Mold temperature	60 - 80	°C	-

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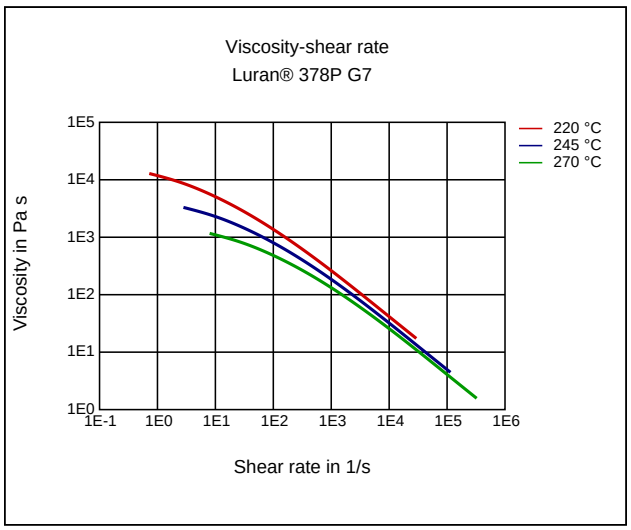
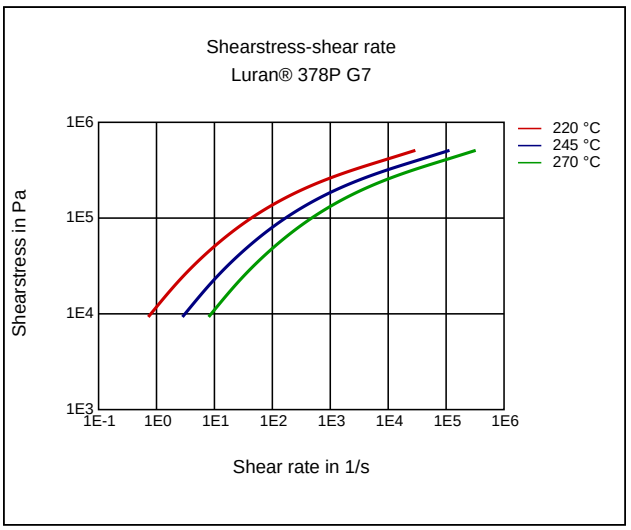
Diagrams

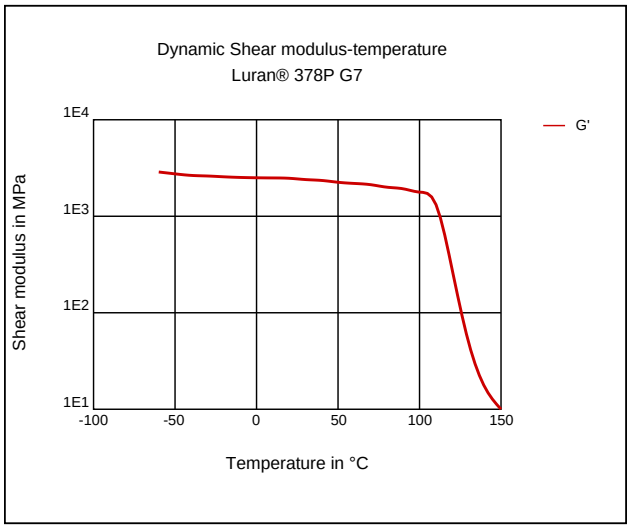
Viscosity-shear rate



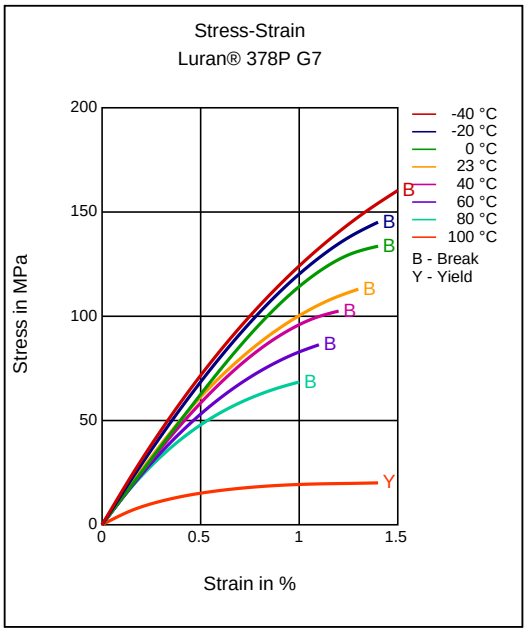
Shearstress-shear rate



Dynamic Shear modulus-temperature



Stress-strain



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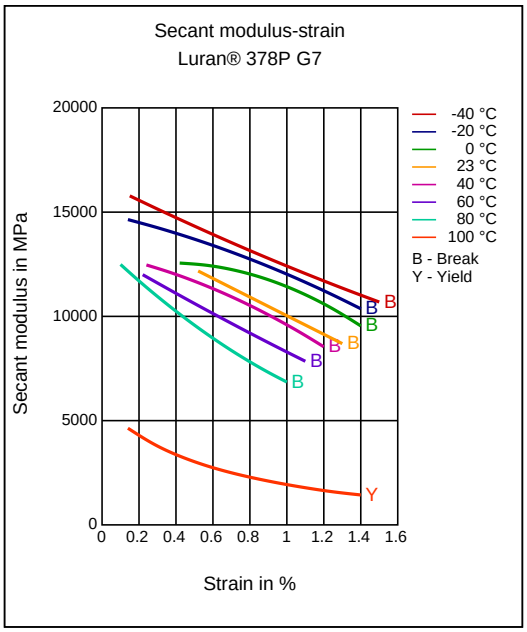
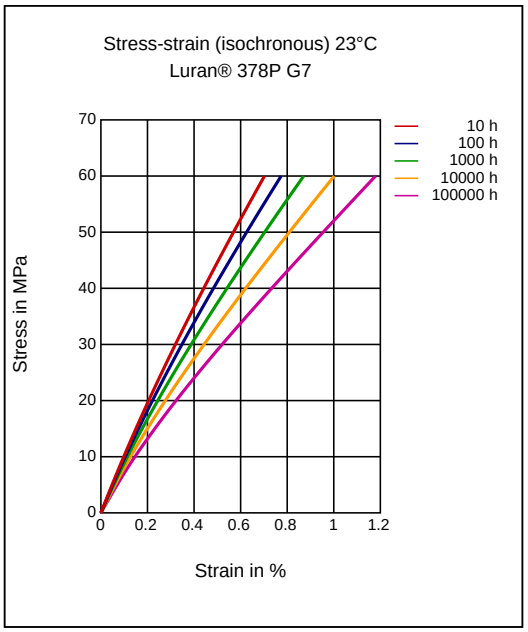
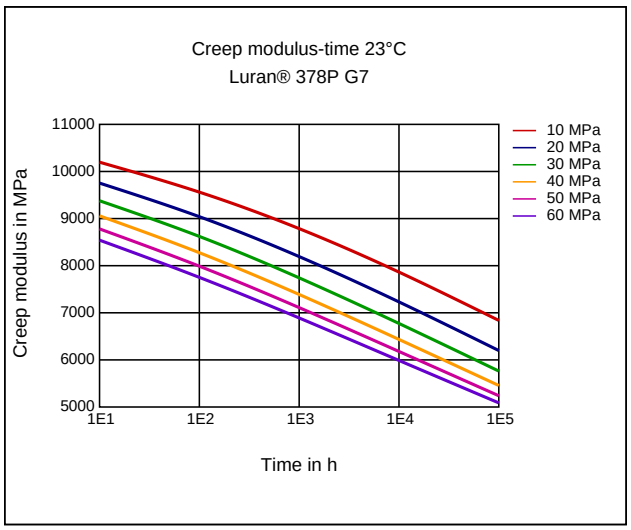
Secant modulus-strain



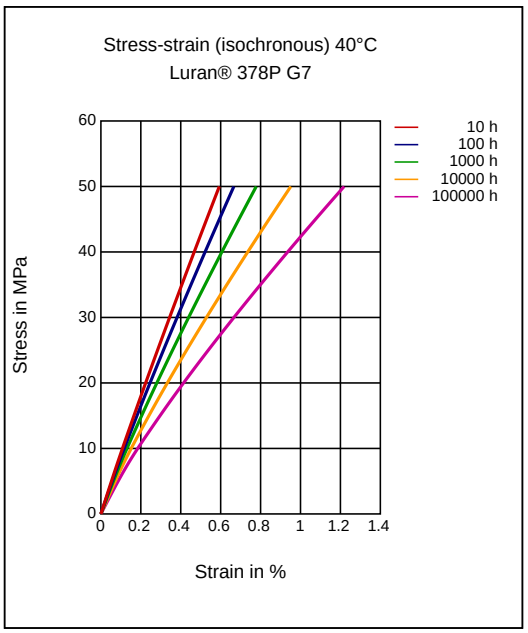
Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



Stress-strain (isochronous) 40 °C



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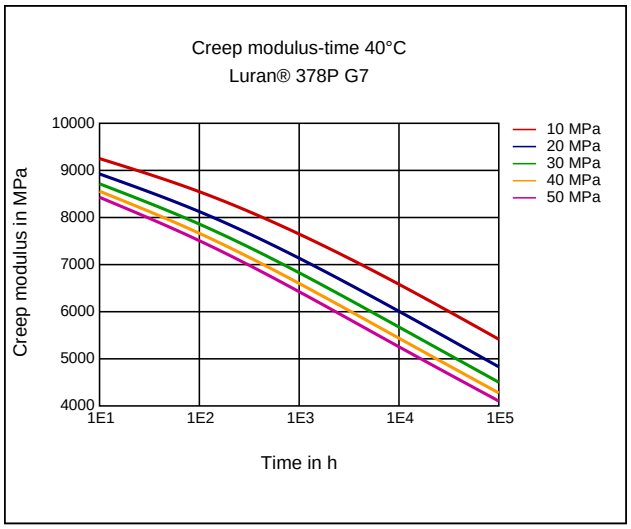
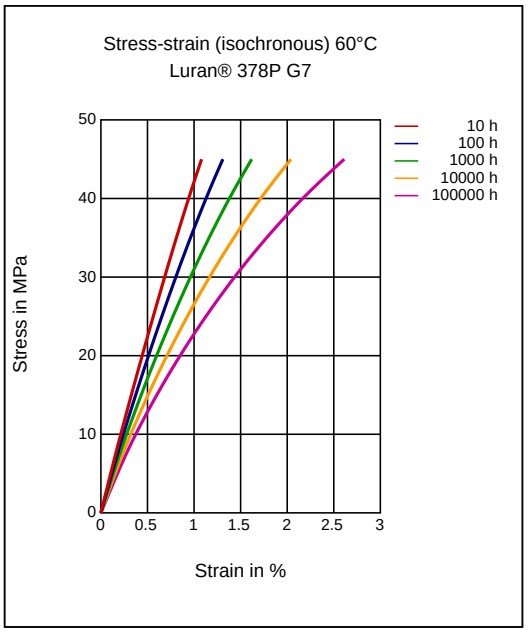
SAN-GF35 INEOS Styrolution

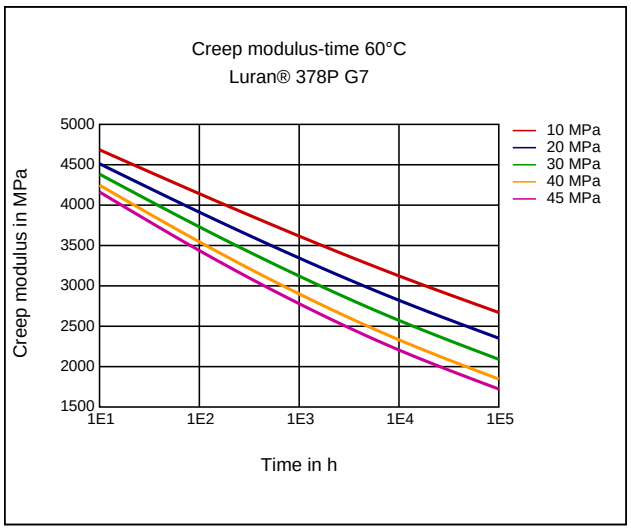
Creep modulus-time 40 °C



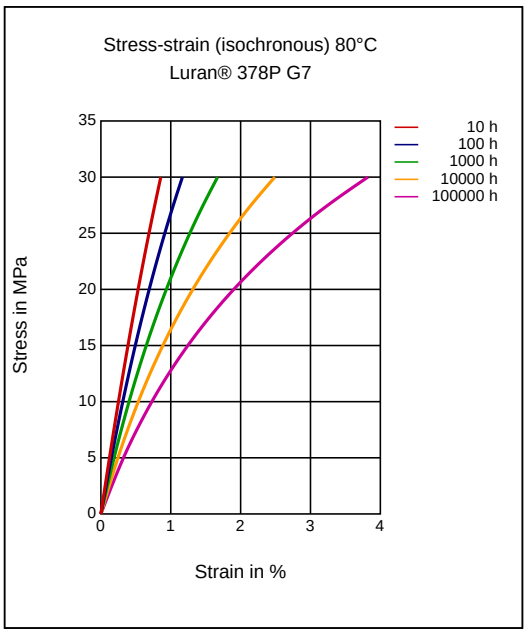
Stress-strain (isochronous) 60 °C



Creep modulus-time 60 °C



Stress-strain (isochronous) 80 °C



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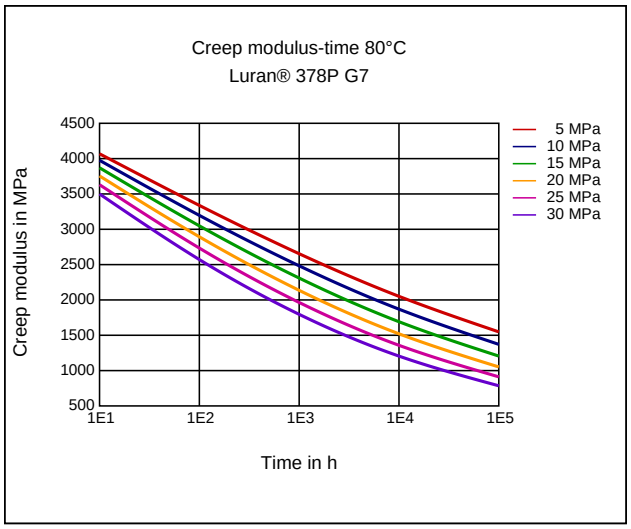
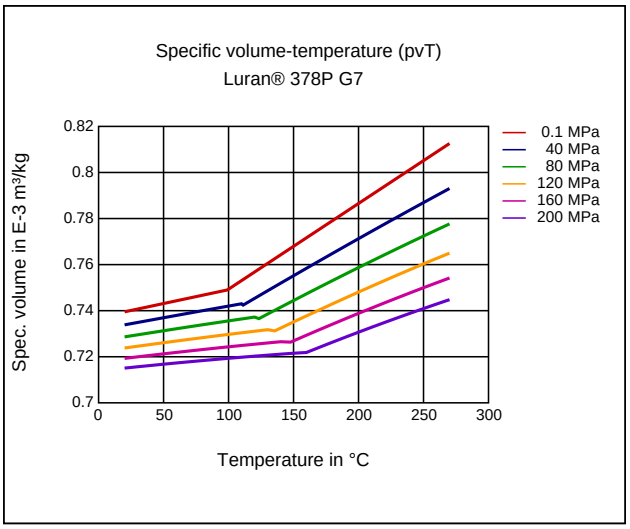
SAN-GF35 INEOS Styrolution

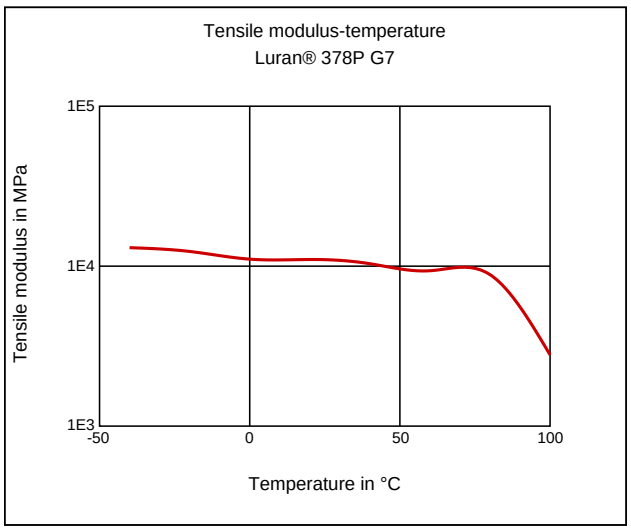
Creep modulus-time 80 °C



Specific volume-temperature (pvT)



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding, Profile Extrusion, Other Extrusion

Delivery form

Pellets

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 80 °C

Pre-drying, Time: 2 - 4h

PROCESSING

Melt temperature, range: 220 - 260 °C

Mold temperature, range: 40 - 80 °C

Other Extrusion

PREPROCESSING

Pre-drying, Temperature: 80 °C

Pre-drying, Time: 2 - 4h

PROCESSING

Prepreg, Melt temperature: 220 - 240 °C
Pipes, Melt temperature: 220 - 240 °C

Profile extrusion

PREPROCESSING
Pre-drying, Temperature: 80 °C
Pre-drying, Time: 2 - 4h
PROCESSING
Profiles, Melt temperature: 240 °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)
- ✔ 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

- ✔ Methanol (23 °C)
- ✔ Ethanol (23 °C)

Hydrocarbons

- ✔ iso-Octane (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

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