

Terlux® HD 2802
MABS

INEOS Styrolution

Terlux® HD 2802 is a standard injection molding grade based on a MABS polymer. Terlux® HD 2802 offers an unique combination of properties, such as a balanced stiffness/toughness ratio and the high transparency well known in SAN molding compositions. Food contact statements are available on request.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	2	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2000	MPa	ISO 527
Yield stress	48	MPa	ISO 527
Yield strain	4	%	ISO 527
Nominal strain at break	12	%	ISO 527
Impact Strength (Charpy), +23°C	120	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	5	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	2	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	90	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	94	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	93	°C	ISO 306
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3.0	mm	-
UL recognition	yes	-	-

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.7	%	Sim. to ISO 62
Humidity absorption	0.35	%	Sim. to ISO 62
Density	1080	kg/m ³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	960	kg/m ³	-
Thermal Conductivity of Melt	0.155	W/(m K)	-
Spec. heat capacity of melt	2060	J/(kg K)	-
Ejection temperature	90	°C	-

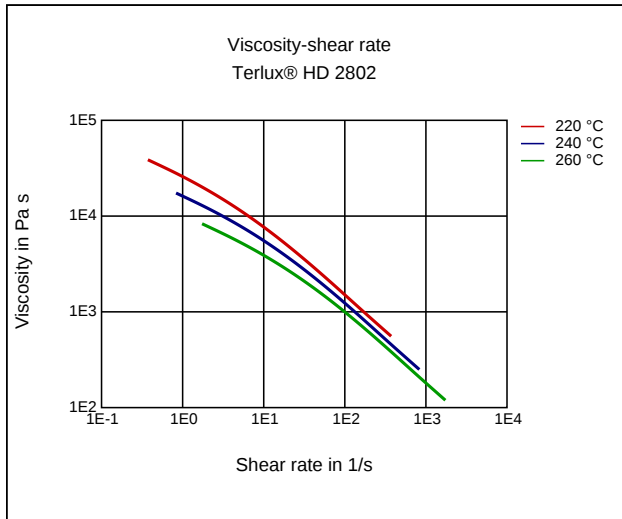
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	70	°C	-
Pre-drying - Time	2	h	-
Melt temperature	230 - 260	°C	-
Mold temperature	50 - 80	°C	-

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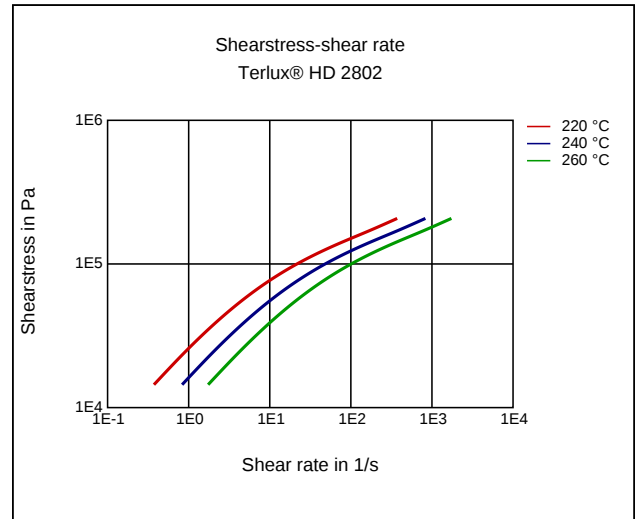
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Diagrams

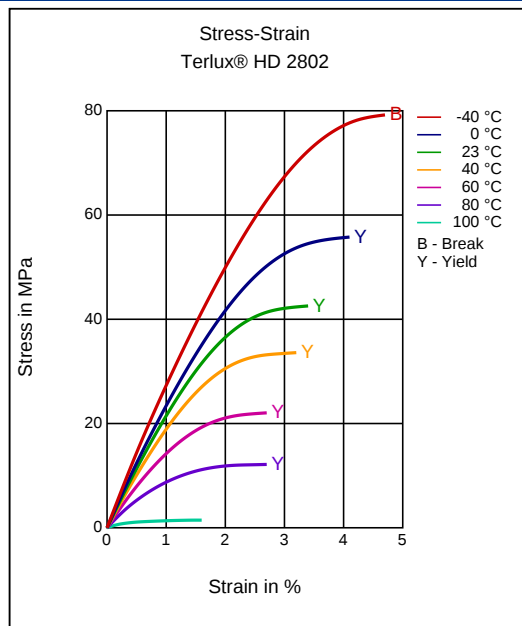
Viscosity-shear rate



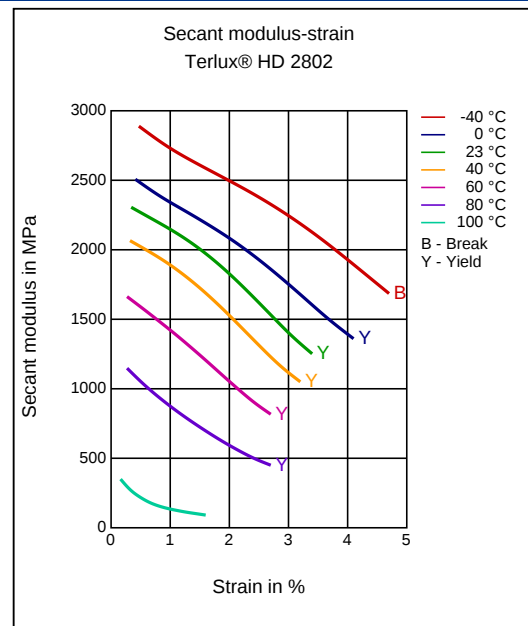
Shearstress-shear rate



Stress-strain



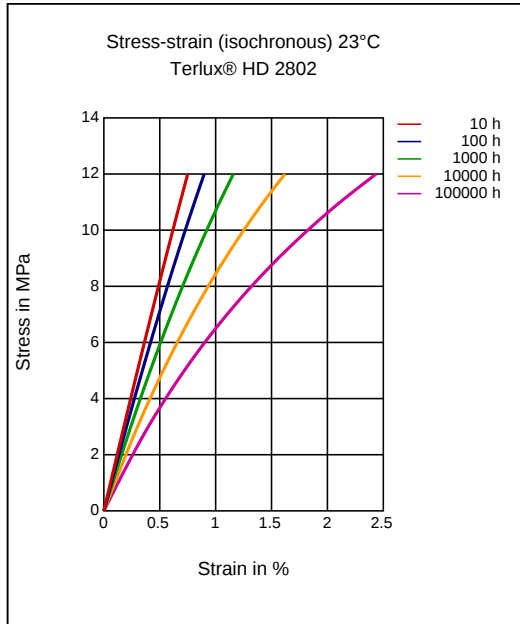
Secant modulus-strain



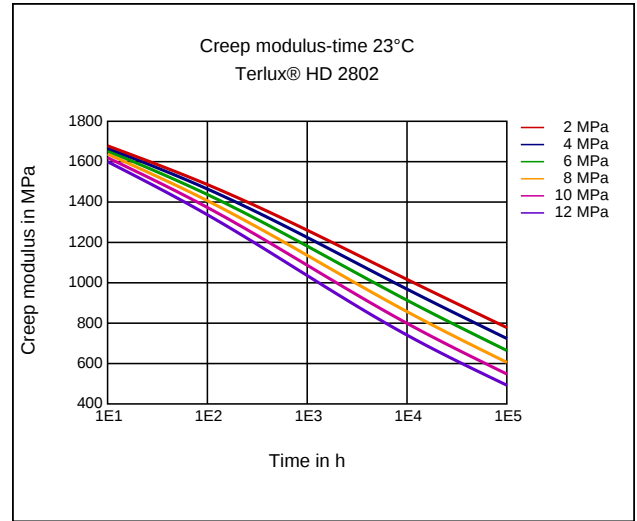
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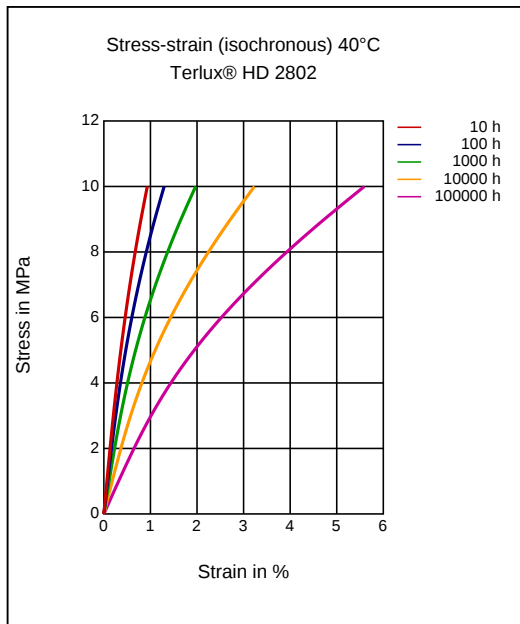
Stress-strain (isochronous) 23°C



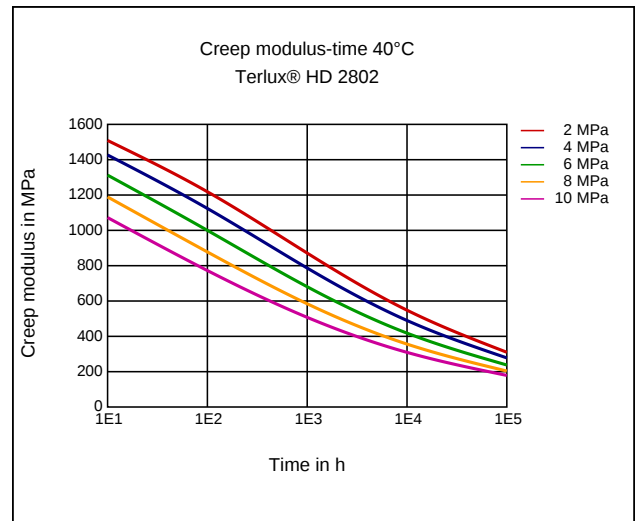
Creep modulus-time 23°C



Stress-strain (isochronous) 40°C



Creep modulus-time 40°C

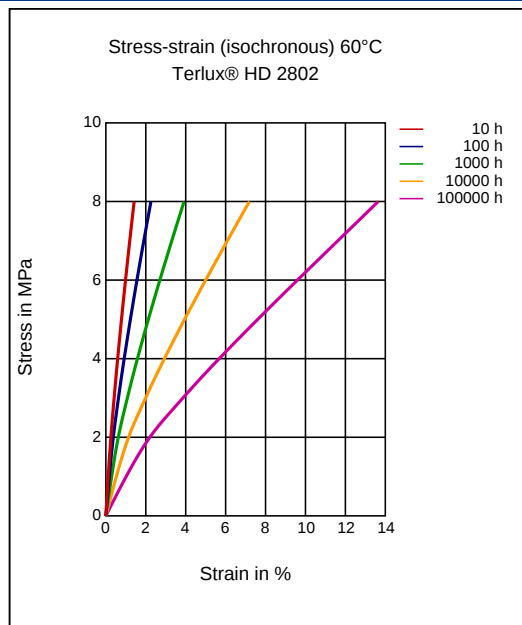


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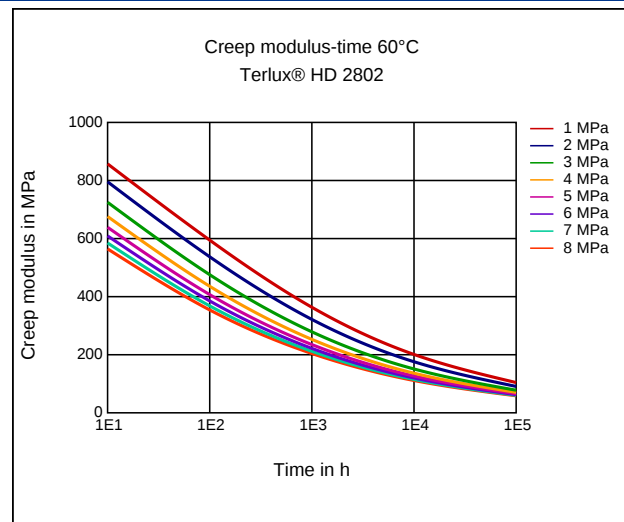
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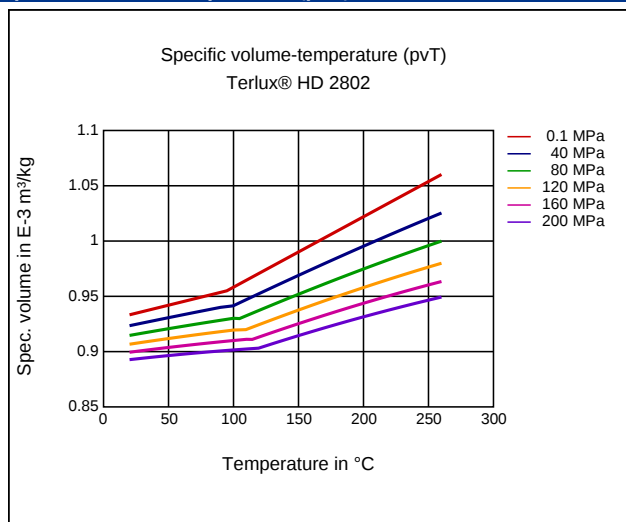
Stress-strain (isochronous) 60 °C



Creep modulus-time 60 °C



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Blow Molding, Thermoforming

Delivery form

Pellets

Special Characteristics

Transparent, Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

Injection Molding

PREPROCESSING

Chemical Resistance

Radiation Resistance

Certifications

Medical, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved, Drug Master File, Long term supply assurance, Food approval, Food approval 10/2011, Food Contact (FDA)

Applications

Medical

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Pre-drying, Temperature: 70°C

Pre-drying, Time: 2h

PROCESSING

Melt temperature, range: 230 - 260°C

Mold temperature, range: 50 - 75°C