

Novodur® P2H-AT

ABS

INEOS Styrolution

Novodur® P2H-AT is a general purpose injection molding grade providing high flowability and contains an antistatic additive. It is designed for best aesthetics: stable high gloss and smooth finish.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	37	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2500	MPa	ISO 527
Yield stress	44	MPa	ISO 527
Yield strain	2.1	%	ISO 527
Impact Strength (Charpy), +23°C	100	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	18	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	8	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	93	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	97	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	98	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	90	E-6/K	ISO 11359-1/-2
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	-	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Electric Strength	34	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1050	kg/m³	ISO 1183

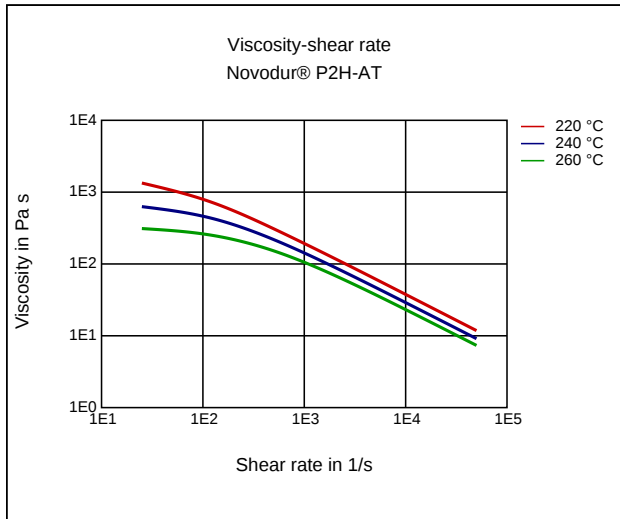
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Thermal Conductivity of Melt	0.129	W/(m K)	-
Spec. heat capacity of melt	1800	J/(kg K)	-

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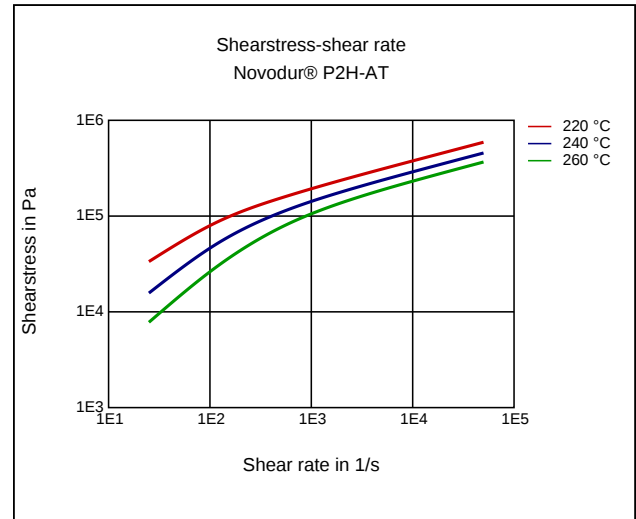
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Diagrams

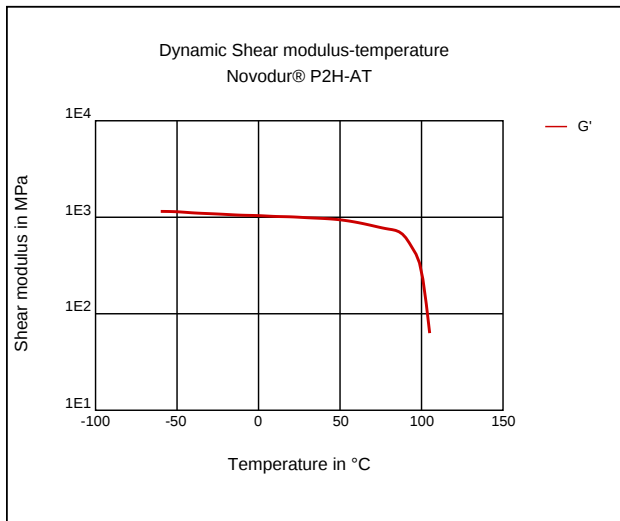
Viscosity-shear rate



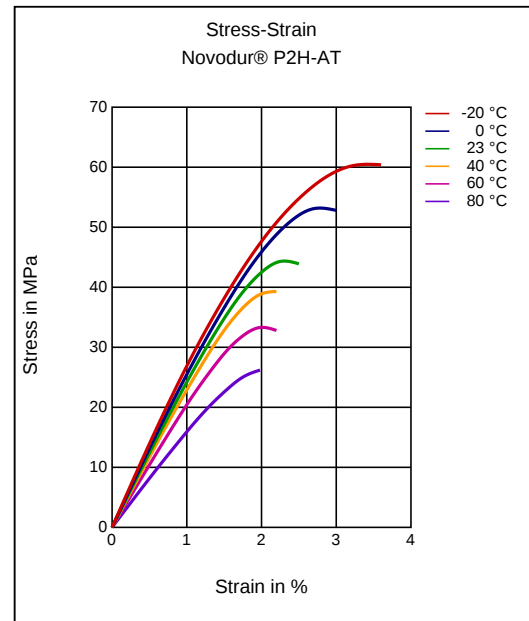
Shearstress-shear rate



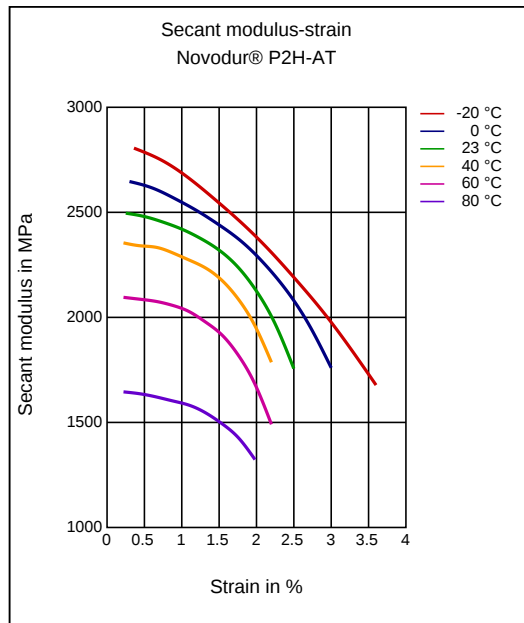
Dynamic Shear modulus-temperature



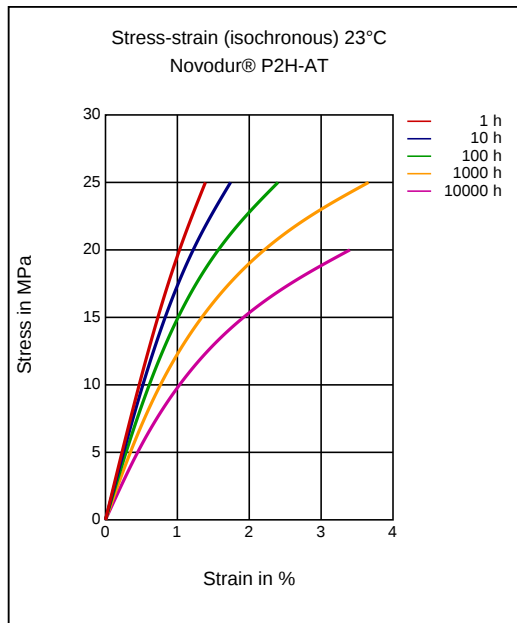
Stress-strain



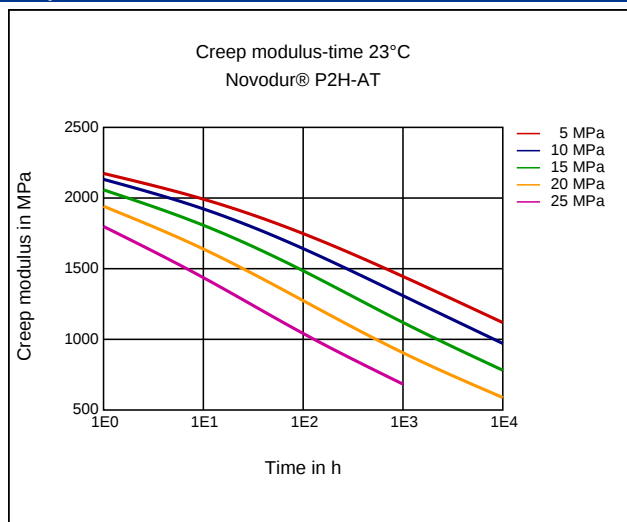
Secant modulus-strain



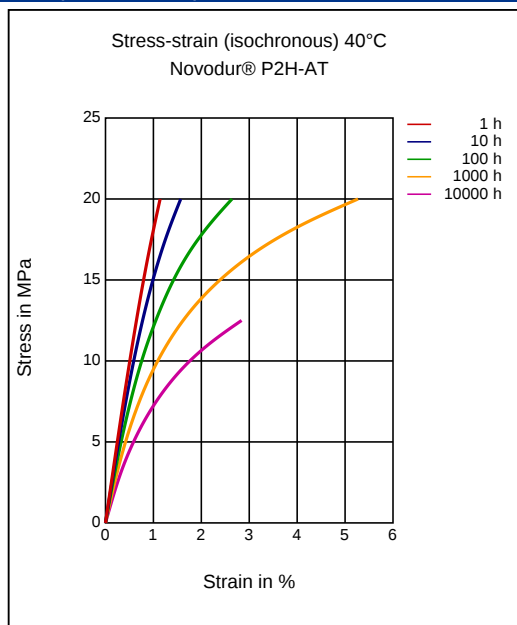
Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



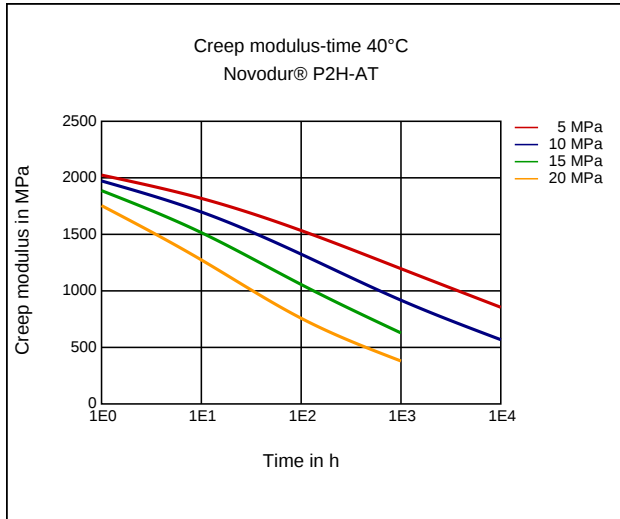
Stress-strain (isochronous) 40 °C



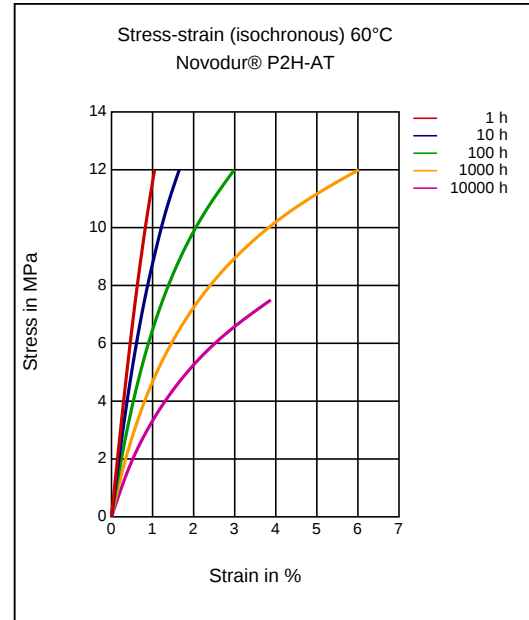
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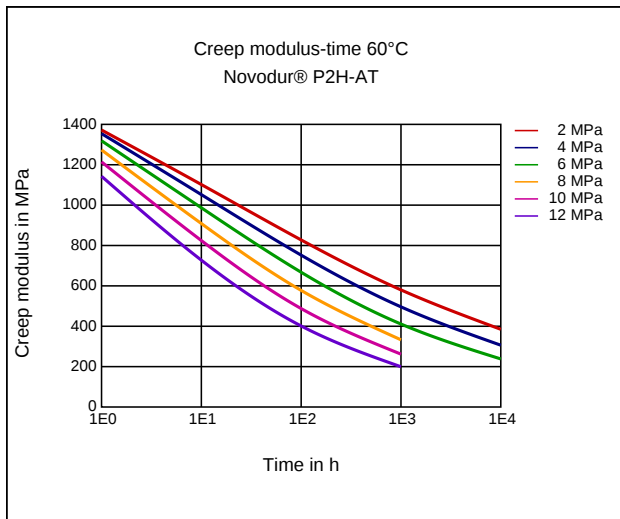
Creep modulus-time 40°C



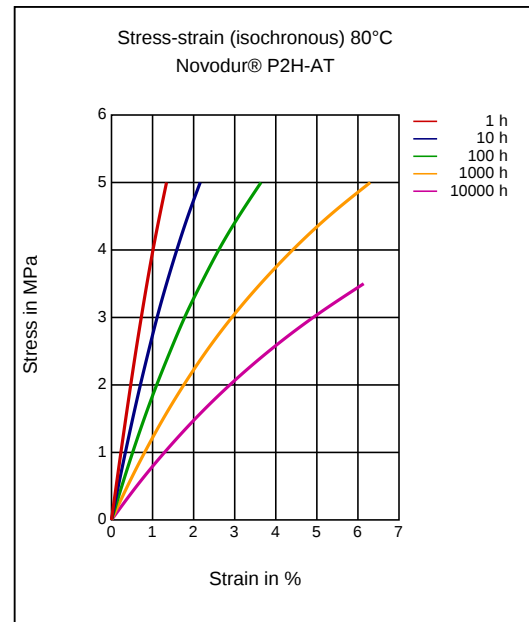
Stress-strain (isochronous) 60°C



Creep modulus-time 60°C



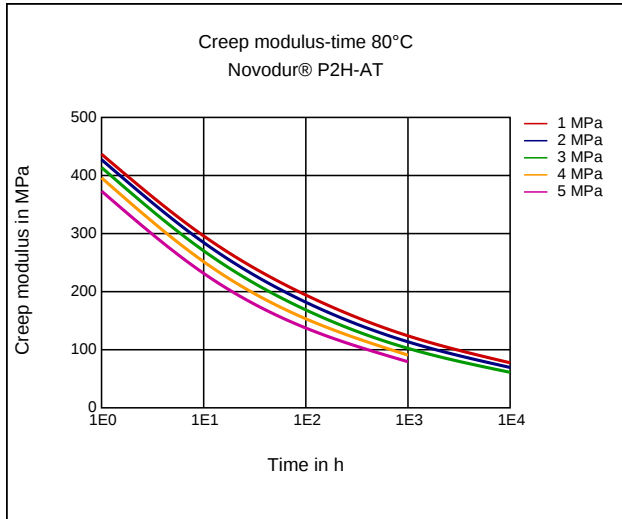
Stress-strain (isochronous) 80°C



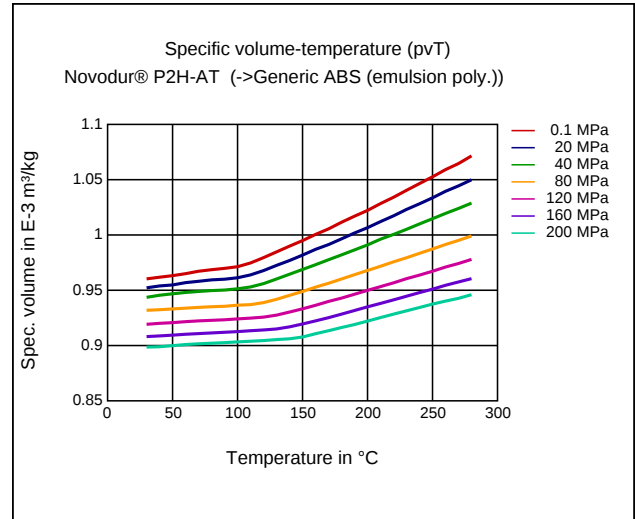
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Creep modulus-time 80 °C



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 80 °C

Pre-drying, Time: 2 - 4h

PROCESSING

Melt temperature, range: 230 - 260 °C

Mold temperature, range: 60 - 80 °C