

Novodur® P3H-AT

ABS

INEOS Styrolution

Improved chemical and dynamic resistance, high gloss, contains antistatic additive

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12	cm ³ /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	48	MPa	ISO 527
Yield strain	2.4	%	ISO 527
Impact Strength (Charpy), +23°C	180	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	90	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	20	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	11	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	92	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	96	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	96	°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	1.6	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.1	-	IEC 62631-2-1
Relative permittivity, 1MHz	2.9	-	IEC 62631-2-1
Dissipation Factor, 100Hz	60	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	80	E-4	IEC 62631-2-1
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	33	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1050	kg/m ³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	895	kg/m ³	-
Thermal Conductivity of Melt	0.129	W/(m K)	-
Spec. heat capacity of melt	1800	J/(kg K)	-
Ejection temperature	85	°C	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	240	°C	ISO 294
Injection Molding, mold temperature	70	°C	ISO 294
Injection Molding, injection velocity	240	mm/s	ISO 294

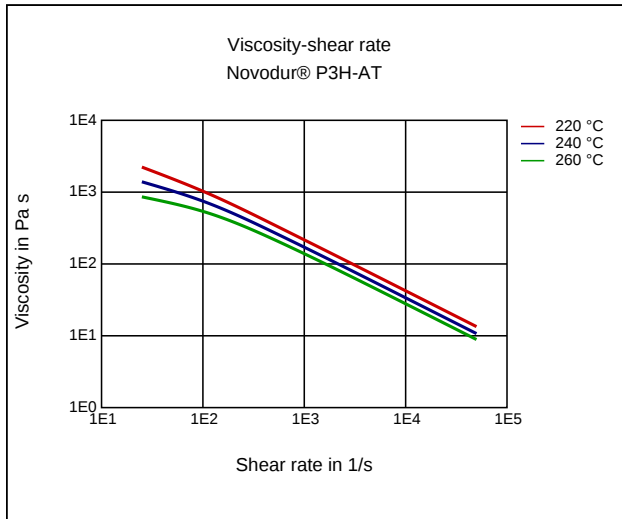
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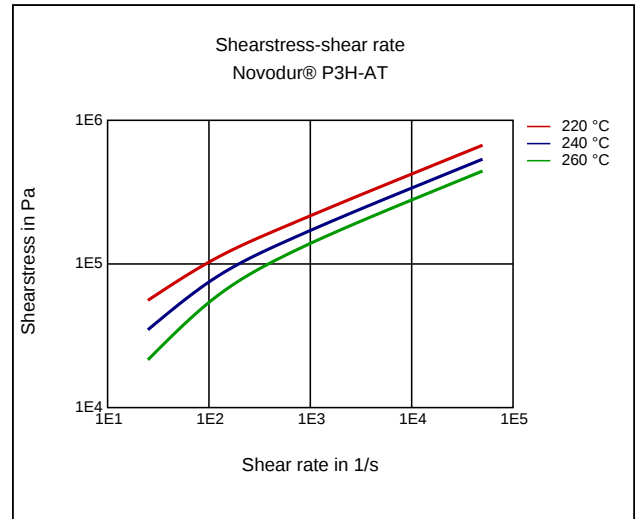
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Diagrams

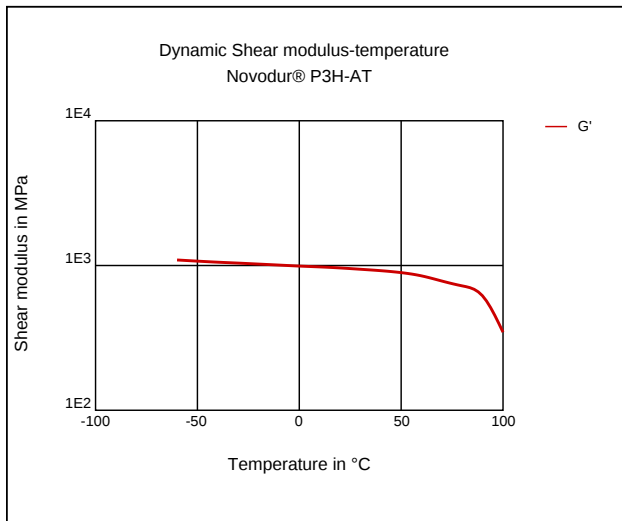
Viscosity-shear rate



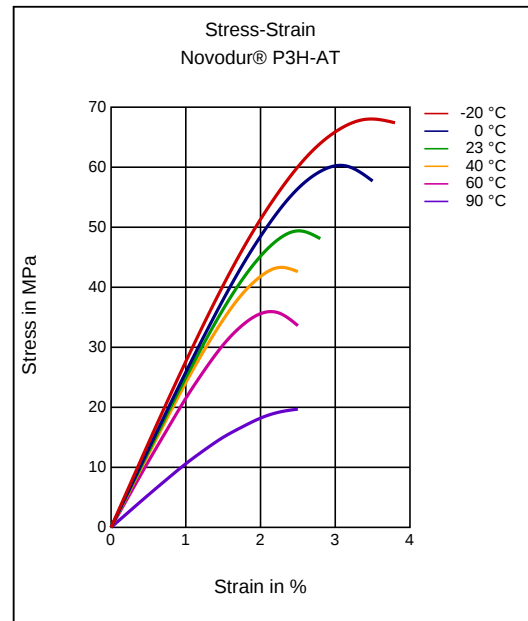
Shearstress-shear rate



Dynamic Shear modulus-temperature



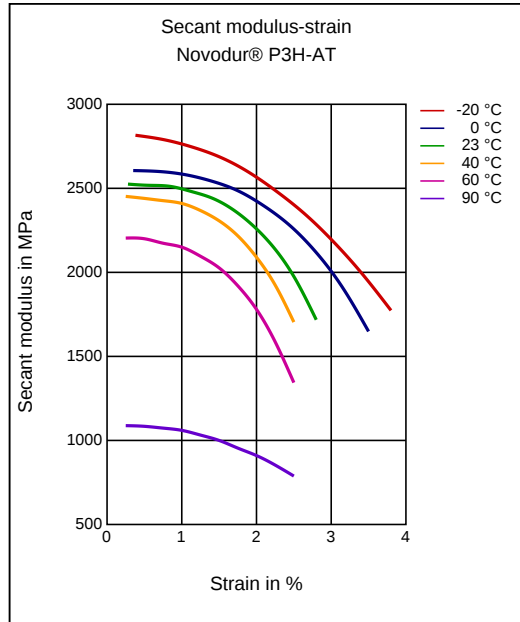
Stress-strain



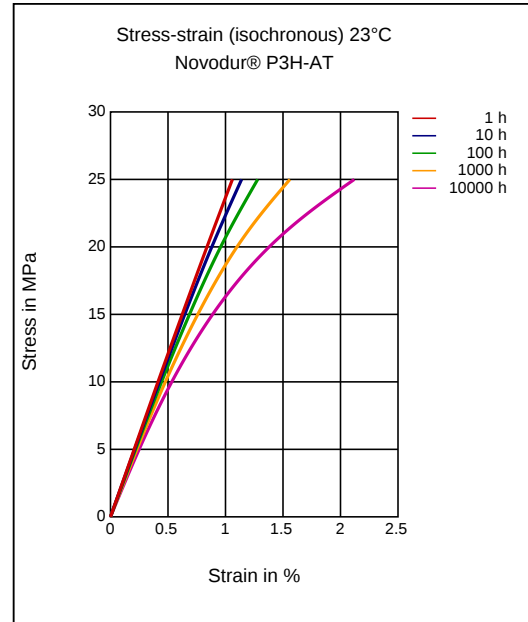
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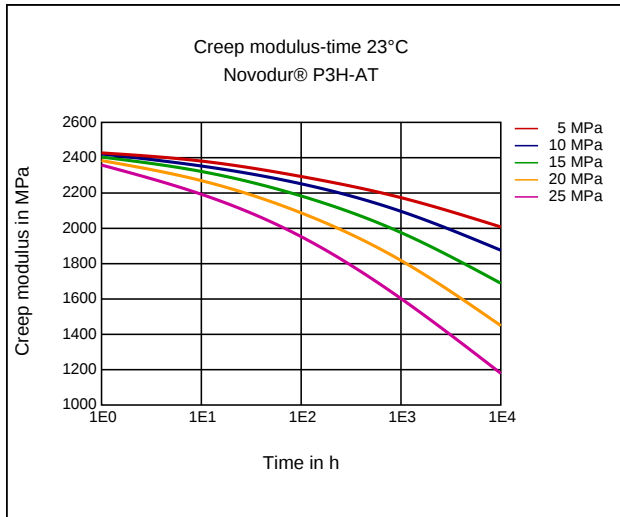
Secant modulus-strain



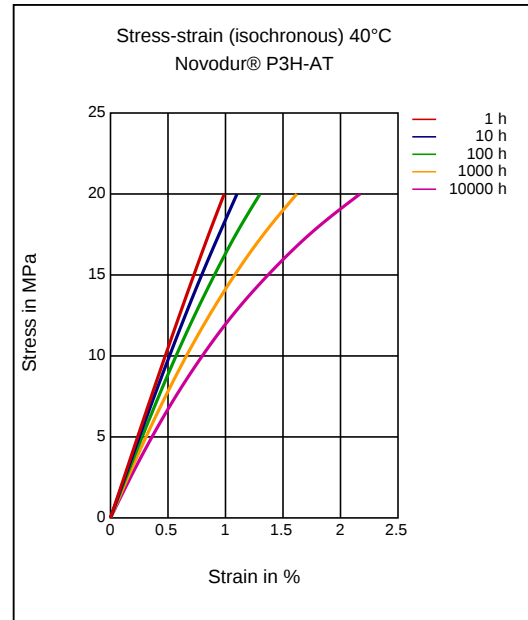
Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



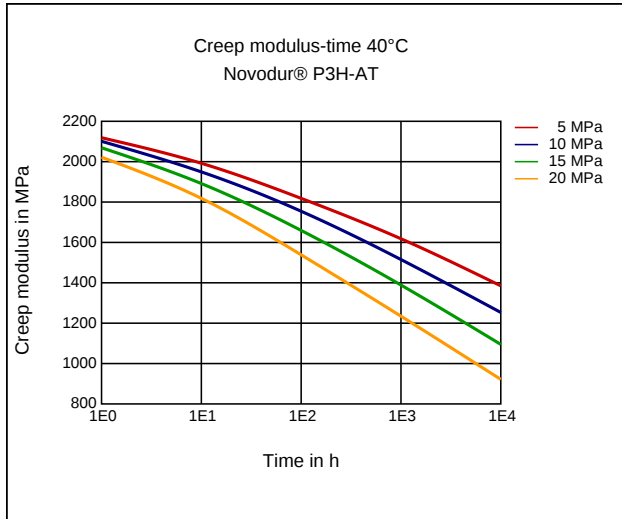
Stress-strain (isochronous) 40 °C



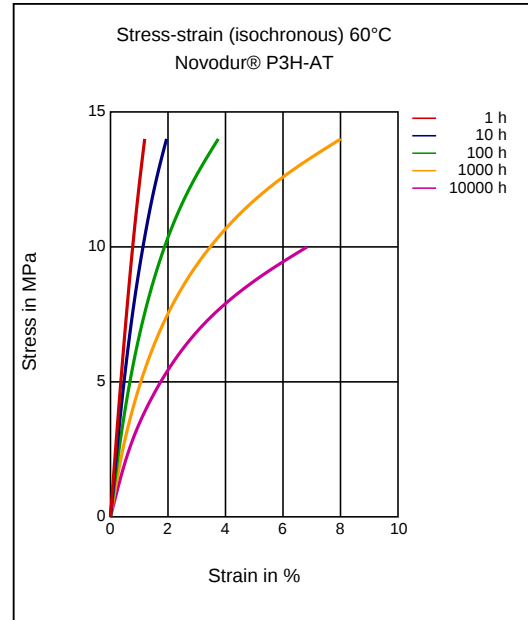
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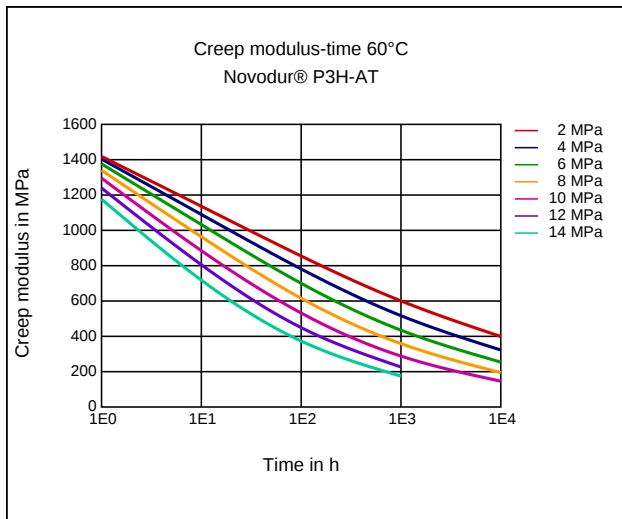
Creep modulus-time 40°C



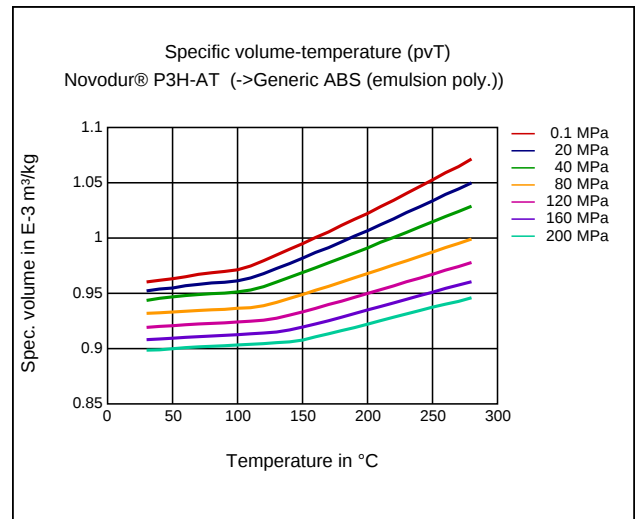
Stress-strain (isochronous) 60°C



Creep modulus-time 60°C



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Anti-static