

Novodur® H605

ABS

INEOS Styrolution

Novodur® H605 acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® H605 is a high heat injection molding grade with enhanced flowability and low emission, i.e. suitable to produce parts which fulfill interior emission requirements of the automotive OEMs. Furthermore, food contact statements are available upon request.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	26	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	47	MPa	ISO 527
Yield strain	2.5	%	ISO 527
Nominal strain at break	17	%	ISO 527
Impact Strength (Charpy), +23°C	90	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	7	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	98	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	102	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	102	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	80	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	-	-

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	1.03	%	Sim. to ISO 62
Density	1050	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	934	kg/m³	-
Thermal Conductivity of Melt	0.188	W/(m K)	-
Spec. heat capacity of melt	2250	J/(kg K)	-
Ejection temperature	98	°C	-

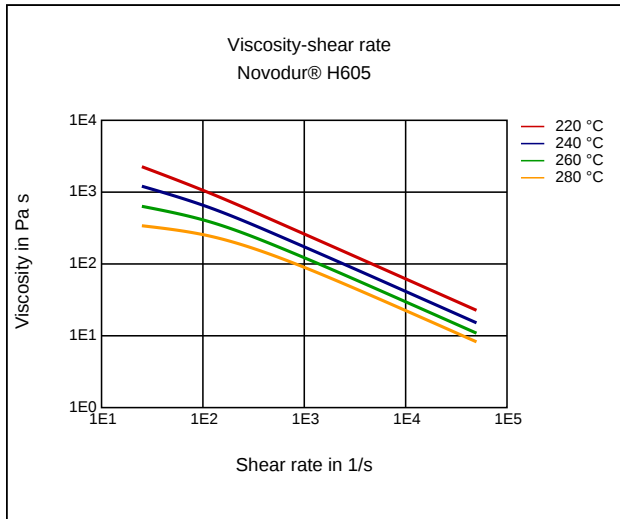
Novodur® H605

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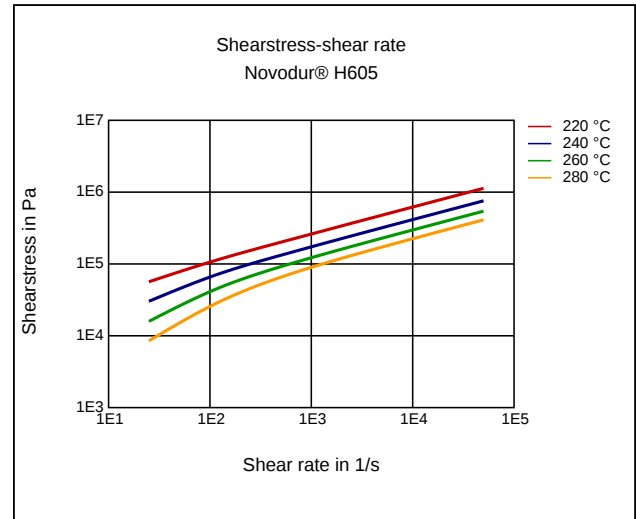
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Diagrams

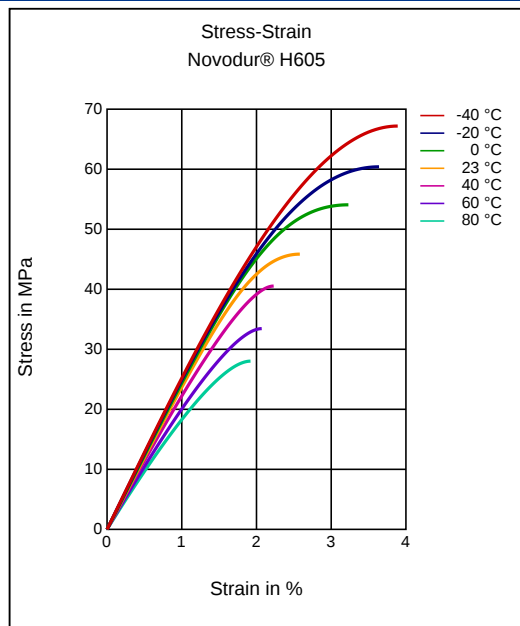
Viscosity-shear rate



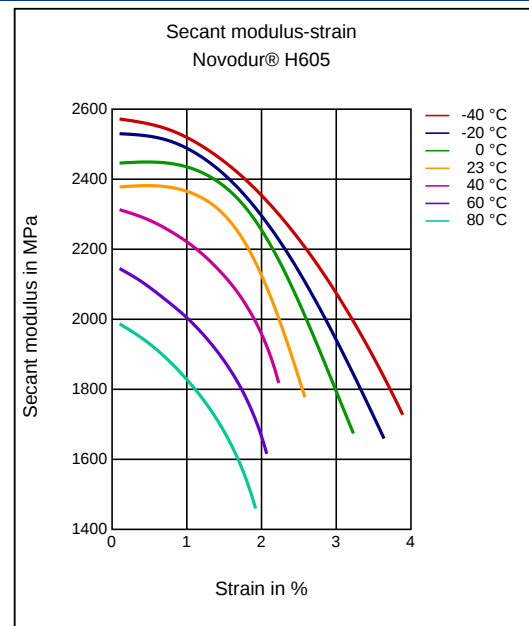
Shearstress-shear rate



Stress-strain



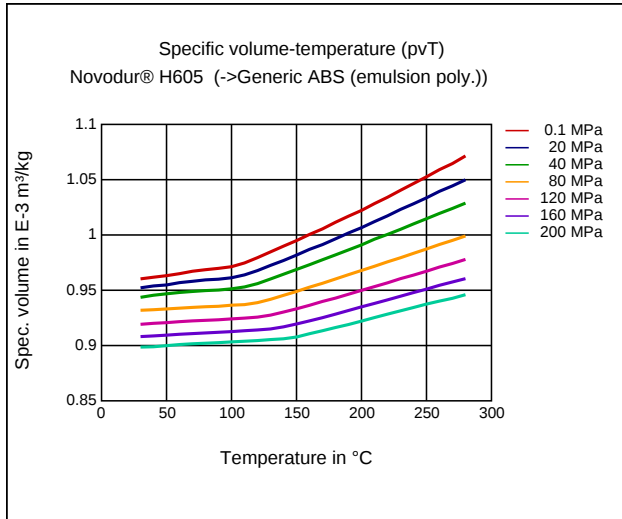
Secant modulus-strain



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Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Features

Low Emission

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