

Novodur® H701

ABS

INEOS Styrolution

Novodur® H701 acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® H701 is an ABS injection molding grade with a good balance of heat resistance, impact strength and flowability. Furthermore, it is of low emission, i.e. suitable to produce parts which fulfill interior emission requirements of the automotive OEMs.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	8	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2100	MPa	ISO 527
Yield stress	41	MPa	ISO 527
Yield strain	2.7	%	ISO 527
Nominal strain at break	17	%	ISO 527
Impact Strength (Charpy), +23°C	180	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	120	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	22	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	12	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	99	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	105	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	105	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	90	E-6/K	ISO 11359-1/-2

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Electric Strength	33	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1040	kg/m ³	ISO 1183

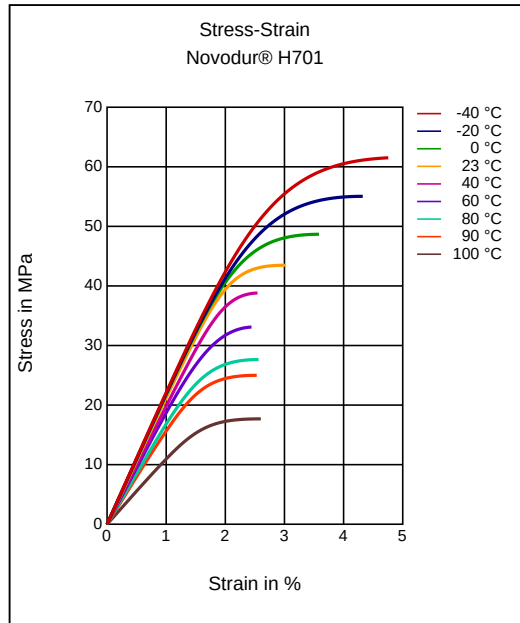
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	936	kg/m ³	-
Thermal Conductivity of Melt	0.18	W/(m K)	-
Spec. heat capacity of melt	2340	J/(kg K)	-

Novodur® H701 ABS

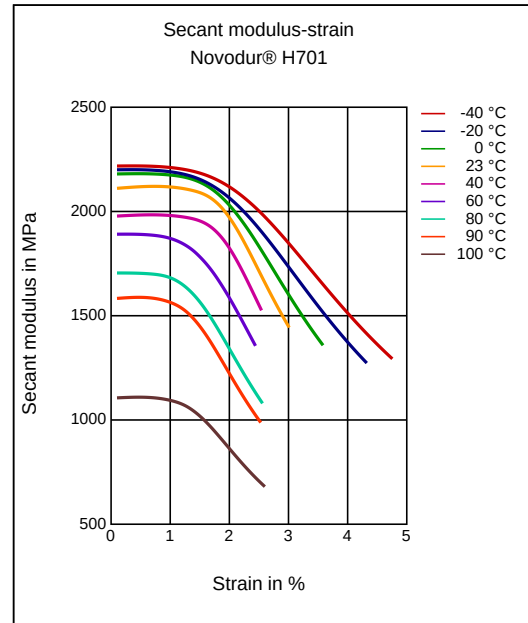
INEOS Styrolution

Diagrams

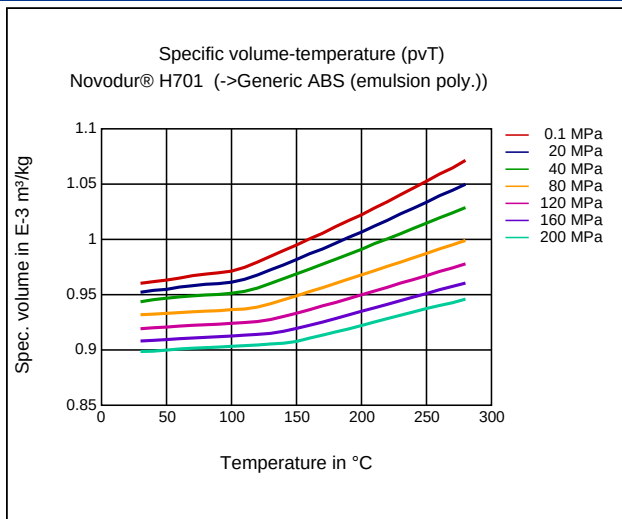
Stress-strain



Secant modulus-strain



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