

NOVODUR H701

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Novodur® acrylonitrile butadiene styrene (ABS) polymers feature 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.

FEATURES

- Heat resistance
- High gloss
- Wide gloss range
- Low emission
- Wide gloss range
- Low emission

APPLICATIONS

- Unpainted automotive interior: loudspeaker grills, air ventings
- Unpainted automotive interior: steering wheel covers, roof consoles
- Automotive exterior trim : mirror housings, exterior pillars & trims, spoilers
- Painted/ decorated Automotive interior: glove boxes, centre consoles, instrument panel trims
- Housings for electrical & electronic devices

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm ³ /10 min	8
Mechanical Properties			
Charpy Notched Impact Strength, 23 °C	ISO 179/1eA	kJ/m ²	22
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m ²	12
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m ²	180
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m ²	120
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m ²	22
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m ²	12
Tensile Modulus	ISO 527	MPa	2100
Tensile Stress at Yield, 23 °C	ISO 527	MPa	41
Tensile Strain at Yield, 23 °C	ISO 527	%	2.7
Tensile Stress at Break, 23 °C	ISO 527	MPa	33

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Property, Test Condition	Standard	Unit	Values
Tensile Strain at Break, 23 °C	ISO 527	%	> 15
Nominal Strain at Break, 23 °C	ISO 527	%	17
Flexural Modulus, 23 °C	ISO 178	MPa	2100
Flexural Strength, 23 °C	ISO 178	MPa	65
Hardness, Ball Indentation	ISO 2039-1	MPa	95
Thermal Properties			
Vicat Softening Temperature, VST/B/120 (50N, 120 °C/h)	ISO 306	°C	107
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	105
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	99
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	105
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	90
Electrical Properties			
Dielectric Strength, Short Time, 1.0 mm	IEC 60243-1	kV/mm	33
Comparative Tracking Index	IEC 60112	V	600
Other Properties			
Density	ISO 1183	kg/m ³	1040
Glow wire test (GWFI), 2.0 mm	IEC 60695-2-12	°C	700
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.5 - 0.8
Melt Temperature Range	ISO 294	°C	230 - 260
Mold Temperature Range	ISO 294	°C	60 - 80
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4