

Novodur HH-112

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Novodur® acrylonitrile butadiene styrene (ABS) polymers feature high surface quality and good impact strength. Novodur® HH-112 is a high heat injection molding grade. It provides extraordinary heat resistance combined with enhanced stiffness.

FEATURES

- Heat resistance
- Well extrudable
- Rigidity

APPLICATIONS

- Housings for electrical & electronic devices
- Automotive rear light housings
- 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	5.5
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	11
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m ²	6
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m ²	140
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m ²	80
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m ²	12
Izod Unnotched Impact Strength, -30 °C	ISO 180	kJ/m ²	5
Tensile Modulus	ISO 527	MPa	2700
Tensile Stress at Yield, 23 °C	ISO 527	MPa	58
Tensile Strain at Yield, 23 °C	ISO 527	%	3.1
Tensile Stress at Break, 23 °C	ISO 527	MPa	40
Nominal Strain at Break, 23 °C	ISO 527	%	8
Flexural Modulus, 23 °C	ISO 178	MPa	2700
Flexural Strength, 23 °C	ISO 178	MPa	81
Hardness, Ball Indentation	ISO 2039-1	MPa	114
Thermal Properties			

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Property, Test Condition	Standard	Unit	Values
Vicat Softening Temperature, VST/B/120 (50N, 120 °C/h)	ISO 306	°C	113
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	111
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	102
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	110
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	90
Thermal Conductivity	ISO 22007-4	W/(m K)	0.17
Electrical Properties			
Dielectric Strength, Short Time, 1.5 mm	IEC 60243-1	kV/mm	41
Comparative Tracking Index	IEC 60112	V	600
Other Properties			
Density	ISO 1183	kg/m ³	1050
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.25
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
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