INEOS STYROLUTION

NOVODUR H605

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Novodur® acrylonitrile butadiene styrene (ABS) polymers feature 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.

FEATURES

- Low emission
- Wide gloss range
- Good paintability
- Easy processing

APPLICATIONS

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

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	26
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	15
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	7
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	90
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	80
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	15
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m²	7
Tensile Modulus	ISO 527	MPa	2400
Tensile Stress at Yield, 23 °C	ISO 527	MPa	47
Tensile Strain at Yield, 23 °C	ISO 527	%	2.5
Tensile Stress at Break, 23 °C	ISO 527	MPa	34
Tensile Strain at Break, 23 °C	ISO 527	%	> 15

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Property, Test Condition	Standard	Unit	Values
Nominal Strain at Break, 23 °C	ISO 527	%	17
Flexural Modulus, 23 °C	ISO 178	MPa	2400
Flexural Strength, 23 °C	ISO 178	MPa	72
Hardness, Ball Indentation	ISO 2039-1	MPa	111
Thermal Properties			
Vicat Softening Temperature, VST/B/120 (50N, 120 °C/h)	ISO 306	°C	104
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	102
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	98
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	102
Coefficient of Linear Thermal Expansion	ISO 11359	10^{-6}/°C	80
Electrical Properties			
Dielectric Strength, Short Time, 1.0 mm	IEC 60243-1	kV/mm	33
Dielectric Strength, Short Time, 1.5 mm	IEC 60243-1	kV/mm	33
Comparative Tracking Index	IEC 60112	V	600
Other Properties			
Density	ISO 1183	kg/m³	1050
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
Glow wire test (GWFI), 2.0 mm	IEC 60695-2-12	°C	700
Water Absorption, Saturated at 23 °C	ISO 62	%	1.03
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.6
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