

Novodur E3TZ

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Novodur® acrylonitrile butadiene styrene (ABS) polymers feature high surface quality and good impact strength. Novodur® E3TZ is an extrusion grade with high gloss and good surface appearance. It is optimized for processing via thermoforming. Furthermore, food contact statements are available upon request.

FEATURES

- Balanced properties
- High gloss
- High surface quality

APPLICATIONS

- Food contact applications
- Extruded sheets & profiles

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	8
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	19
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	9
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	150
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	110
Tensile Modulus	ISO 527	MPa	2550
Tensile Stress at Yield, 23 °C	ISO 527	MPa	48
Tensile Strain at Yield, 23 °C	ISO 527	%	2.6
Tensile Stress at Break, 23 °C	ISO 527	MPa	35
Nominal Strain at Break, 23 °C	ISO 527	%	> 15
Flexural Modulus, 23 °C	ISO 178	MPa	2600
Flexural Strength, 23 °C	ISO 178	MPa	75
Hardness, Ball Indentation	ISO 2039-1	MPa	110
Thermal Properties			
Vicat Softening Temperature, VST/B/120 (50N, 120 °C/h)	ISO 306	°C	102
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	100

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Property, Test Condition	Standard	Unit	Values
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	103
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	35
Surface Resistivity	IEC 62631-3-1	Ohm	600
Other Properties			
Density	ISO 1183	kg/m ³	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
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
Melt Temperature Range	ISO 294	°C	210 - 260
Mold Temperature Range	ISO 294	°C	60 - 80
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4