

# Novodur ECO P2H-AT MR50

Acrylonitrile Butadiene Styrene (ABS)

## TECHNICAL DATASHEET

### DESCRIPTION

Novodur® ECO P2H-AT MR50 is a general purpose injection molding grade providing high flowability available in multiple colours. It is designed for best aesthetics: stable high gloss and smooth finish. The product contains 50% post-consumer mechanically recycled ABS and has received RecyClass certification.

### FEATURES

- Balanced properties
- Easy processing
- Good paintability
- High gloss

### APPLICATIONS

- Housings for electrical & electronic devices
- Electrical and electronic components, switches, house automation
- Coffee machines
- Vacuum cleaner housings
- Cosmetic packaging

Property, Test Condition	Standard	Unit	Values
<b>Sustainability Properties</b>			
Carbon Footprint Reduction vs Fossil-Based (3rd party validated)	ISO 14044	%	38
Post-Consumer Recycled ABS Content (RecyClass-certified)	-	%	50
<b>Rheological Properties</b>			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	33
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	18
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m <sup>2</sup>	8
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m <sup>2</sup>	80
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m <sup>2</sup>	70
Tensile Modulus	ISO 527	MPa	2500
Tensile Stress at Yield, 23 °C	ISO 527	MPa	45
Tensile Strain at Yield, 23 °C	ISO 527	%	2.2
Tensile Stress at Break, 23 °C	ISO 527	MPa	38
Nominal Strain at Break, 23 °C	ISO 527	%	6
Flexural Modulus, 23 °C	ISO 178	MPa	2400

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Flexural Strength, 23 °C	ISO 178	MPa	70
Hardness, Ball Indentation	ISO 2039-1	MPa	85
<b>Thermal Properties</b>			
Vicat Softening Temperature, VST/B/120 (50N, 120 °C/h)	ISO 306	°C	98
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	96
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	91
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	95
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1050
<b>Processing</b>			
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