

Product Texts

Novodur® ECO P2H-AT BC50 as acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® ECO P2H-AT BC50 is a general purpose injection molding grade with enhanced chemical resistance and contains an antistatic additive. It is designed for best aesthetics: stable high gloss and smooth finish. Novodur® ECO P2H-AT BC50 is an ISCC compliant product leading to a substitution of fossil source styrene with ISCC certified bio-attributed styrene.

Carbon Footprint Reduction vs Fossil-Based (3rd party validated): 68 % (ISO 14044)

Attributed Content of ISCC-certified Bio-Circular Sources (min.): 50 %

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	37	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
^[C] Thermal conductivity of melt	0.129	W/(m K)	-
^[C] Spec. heat capacity of melt	1800	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2500	MPa	ISO 527
^[C] Yield stress	44	MPa	ISO 527
^[C] Yield strain	2.1	%	ISO 527
Nominal strain at break	18	%	ISO 527
Flexural modulus, 23°C	2400	MPa	ISO 178
Flexural strength	70	MPa	ISO 178
^[C] Charpy impact strength, +23°C	100	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	80	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	18	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	18	kJ/m ²	ISO 180/1A
Izod notched impact strength	9	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Ball indentation hardness	110	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	93	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	97	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	98	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-
Burning rate, FMVSS, Thickness 1 mm	60^[1]	mm/min	ISO 3795 (FMVSS 302)
Glow Wire Flammability Index (GWFI)	700	°C	IEC 60695-2-12
GWFI - thickness tested (1)	2	mm	-

1: 2 mm [C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Electric strength	34	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1050	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	230 - 260	°C	-
Mold temperature	60 - 80	°C	-

Characteristics

Processing

Injection Molding

Chemical Resistance

General Chemical Resistance

Delivery form

Pellets

Certifications

Contains renewable resources, ISCC Plus

Special Characteristics

Anti-static, High impact or impact modified

Applications

Electrical and Electronical, General Purpose, Packaging

Features

High Gloss

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

PROCESSING

Melt temperature, range: 230 - 260°C

Mold temperature, range: 60 - 80°C