

Product Texts

Novodur® ECO P2MC BC50 as acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® ECO P2MC BC50 is an injection molding grade especially suitable for electroplating, providing high flowability. Novodur® ECO P2MC 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): 64 % (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	25	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
^[C] Density of melt	916	kg/m ³	-
^[C] Thermal conductivity of melt	0.19	W/(m K)	-
^[C] Spec. heat capacity of melt	2380	J/(kg K)	-
^[C] Ejection temperature	96	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2200	MPa	ISO 527
^[C] Yield stress	40	MPa	ISO 527
^[C] Yield strain	2.4	%	ISO 527
^[C] Nominal strain at break	16	%	ISO 527
Flexural modulus, 23°C	2100	MPa	ISO 178
Flexural strength	62	MPa	ISO 178
^[C] Charpy impact strength, -30°C	150	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	25	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	16	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	25	kJ/m ²	ISO 180/1A
Izod notched impact strength	16	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Ball indentation hardness	91	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	94	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	96	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	96	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	100	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	50 ^[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	37	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1030	kg/m ³	ISO 1183
Bulk density	600	kg/m ³	-

[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

Certifications

Contains renewable resources, ISCC Plus

Delivery form

Pellets

Applications

Automotive, Packaging

Special Characteristics

Platable, High impact or impact modified

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