

Product Texts

NAS® ECO 21 BB70 is a styrene acrylic copolymer that can be used in a variety of applications demanding a strong, stiff water-clear plastic resin with excellent thermal stability. NAS® ECO 21 BB70 is a ISCC compliant product leading to a substitution of fossil source styrene with ISCC certified bio-attributed styrene respectively.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	24	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
^[C] Thermal conductivity of melt	0.21	W/(m K)	-
^[C] Spec. heat capacity of melt	2300	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3300	MPa	ISO 527
^[C] Stress at break	60	MPa	ISO 527
^[C] Strain at break	2.5	%	ISO 527
^[C] Charpy impact strength, +23°C	12	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	1.5	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	80	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	90	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	98	°C	ISO 306

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Humidity absorption	0.1	%	Sim. to ISO 62
^[C] Density	1080	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2	h	-
Melt temperature	200 - 240	°C	-
Mold temperature	30 - 50	°C	-

Characteristics

Processing

Injection Molding

Features

Thermal Stability, Copolymer

Delivery form

Pellets

Certifications

Contains renewable resources, ISCC Plus

Special Characteristics

Transparent

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: 2h

PROCESSING

Melt temperature, range: 200 - 240°C

Mold temperature, range: 30 - 50°C