+135-3858-6433 (GuangDong)
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INEOS Styrolution

ALBIS

NAS® ECO 21 BC70

SMMA — INEOS Styrolution

NAS® ECO 21 BC70 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 BC70 is a ISCC compliant product leading to a substitution of fossil source styrene with ISCC certified bio-circular or bio-attributed styrene respectively.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	24	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3300	MPa	ISO 527
Stress at Break	60	MPa	ISO 527
Strain at Break	2.5	%	ISO 527
Impact Strength (Charpy), +23°C	12	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	1.5	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	3400	MPa	ISO 178
Flexural strength	100	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	2.5	kJ/m²	ISO 180/1A
Ball Indentation Hardness	168	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	80	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	90	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	98	°C	ISO 306

Other Properties	Value	Unit	Test Standard
ISO Data			
Humidity absorption	0.1	%	Sim. to ISO 62
Density	1080	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Thermal Conductivity of Melt	0.21	W/(m K)	-
Spec. heat capacity of melt	2300	J/(kg K)	-

Optical Properties	Value	Unit	Test Standard
ASTM Data			
Haze	0.3	%	ASTM D 1003
Light Transmittance	91.3	%	ASTM D 1003
Index of Refraction	1.57	-	ISO 489

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

Chemical Resistance
Radiation Resistance

Delivery form
Pellets

Certifications
Contains renewable resources, Food approval, ISCC Plus

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Special Characteristics

Transparent, Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

Applications

Medical, Packaging

Features

High Gloss, Thermal Stability, Copolymer

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