

Styrolux® ECO 3G55 BC60

SB

INEOS Styrolution

Styrolux® ECO 3G55 BC60 comprises of clear styrene butadiene copolymer. The grade has in general an intrinsic toughness, is easy to process and works as modifier and compatibilizer not only in polystyrene but in many other polymers, e.g. polyolefins. For Styrolux® ECO 3G55 BC60 food contact statements are available upon request. Styrolux® ECO 3G55 BC60 is mainly in sheet extrusion and thermoforming applications. It shows a high performance in blends with general-purpose polystyrene, providing parts with an excellent balance of transparency and toughness. Due to its tendency of blocking, Styrolux® ECO 3G55 BC60 is mainly used in inline thermoforming. Styrolux® ECO 3G55 BC60 is difficult to print and decorate since it contains a microcrystalline wax. Styrolux® ECO 3G55 BC60 is an ISCC compliant product leading to a substitution of fossil source styrene with ISCC certified bio-attributed styrene.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	200	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	900	MPa	ISO 527
Yield stress	16	MPa	ISO 527
Yield strain	2	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Notched Impact Strength (Charpy), +23°C	80	kJ/m ²	ISO 179/1eA
Flexural Modulus (23°C)	900	MPa	ISO 178
Flexural strength	18	MPa	ISO 178

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	51	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	62	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	35	°C	ISO 306
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3.0	mm	-
UL recognition	yes	-	-

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.07	%	Sim. to ISO 62
Density	1010	kg/m ³	ISO 1183

Optical Properties	Value	Unit	Test Standard
ASTM Data			
Haze	3.5	%	ASTM D 1003
Light Transmittance	89	%	ASTM D 1003
Index of Refraction	1.57	-	ISO 489

Processing Recommendation Extrusion	Value	Unit	Test Standard
Melt temperature	180 - 230	°C	-
Mold temperature	30 - 50	°C	-

Characteristics

Processing

Film Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding, Thermoforming

Delivery form

Pellets

Chemical Resistance

Radiation Resistance

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, Sports Equipment

Features

Blending Resin, Copolymer

Film Extrusion

PROCESSING

Blown film, Melt temperature: 180°C

Flat film, Melt temperature: 190 - 230°C

Other Extrusion

PROCESSING

Pipes, Melt temperature: 230°C

Sheet Extrusion

PROCESSING

Sheets, Melt temperature: 190°C
