

Typical Properties for ECOZEN® BS 050

ECOZEN BS series : General

Product Description

ECOZEN BS 050 is eco-friendly bio copolyester which is created using natural materials based on the extract from plant or vegetable materials therefore it does not include environmental hormone bisphenol A (BPA) is a controversial never-ending human hazards. It is useful to sheet extrusion applications because excellent impact strength and high flexural strength and enables to multi-layer sheet with PET, PETG, PC (polycarbonate), ABS, K-resin, Urethane and other resins. It is also suitable for use in the current eco-friendly credit cards because good adhesion of the paper or wood.

Key Attributes

- Excellent Heat Resistance
- Excellent Impact Strength
- High Flexural Strength
- Excellent Chemical & Stain Resistance
- Excellent 2nd Fabrication
- High Transparency and Gloss
- Good Flammability
- Outstanding Optical Properties
- BPA / Phthalate free

Applications / Uses

- Outdoor sign boards
- Disposable food container
(for microwave-oven or gas-oven use)
- Eco-friendly credit cards
- Deco sheets
- Sheet/Film for Optical uses

Headquarter / R&D center

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The information in this data sheet is, to the best of our knowledge, true and accurate. The representations about the product are based upon test results achieved under laboratory practices supervised and controlled by SK chemicals corporation.

Property	Test Method	Unit	Typical Values
Specific Gravity	ASTM D792	-	1.25
Rockwell Hardness	ASTM D785	R-scale	111
Mechanical			MD / TD
Tensile Strength @ Yield 50mm/min (2 inch/min)	ASTM D638	kgf/cm ²	520 / 510
Tensile Strength @ Break 50mm/min (2 inch/min)	ASTM D638	kgf/cm ²	540 / 580
Elongation @ Yield 50mm/min (2 inch/min)	ASTM D638	%	5.8 / 5.7
Elongation @ Break 50mm/min (2 inch/min)	ASTM D638	%	450 / 510
Flexural Strength 1.27mm/min (0.05 inch/min)	ASTM D790	kgf/cm ²	830 / 830
Flexural Modulus 1.27mm/min (0.05 inch/min)	ASTM D790	kgf/cm ²	20,400 / 20,900
Izod Impact Strength, Notched @ 23 °C(73 °F)	ASTM D256	J/m	No Break
Thermal			
Heat Distortion Temperature @ 0.45 MPa @ 1.82 MPa	ASTM D648	°C (°F)	87 (189) 80 (176)
Optical			
Haze	ASTM D1003	%	< 1.0
Transmittance	ASTM D1003	%	89
Flammability			
UL Flammability Classification @ 3.2mm thickness	UL94		V-2

* All properties are measured at 3.0mm thickness sheet.

The data listed here is preliminary data sheet of product. Therefore this sheet should not be used to establish specification limits or used alone as a basis for design. This information is not intended as a warranty of any kind. Customers must make their own representative test and assume all risks of use, whether used alone or in combination with other products. SK Chemicals assumes no obligation or liability of any advice furnished by it or results obtained with respect to these products. All warranties of merchantability for a particular purpose or use are excluded and disclaimed.

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