

Typical Properties for ECOZEN® YF 300

ECOZEN YF series : Food & Beverage

Product Description

ECOZEN YF 300 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. Also it is one of the excellent resins which have chemical resistance and food-stain resistance among the transparent resin used in food contact applications and its low oxygen permeability is useful for food storage container such as the airtight container.

ECOZEN YF 300 has various food contact related use of certification such as FDA (Food Contact Notification (FCN) No. 1075), NSF (the United States), EFSA (EU), JHOSPA (Japan), NHFPC (China) and KFDA (South Korea) and it has also the certification of bioplastics such as BETA certification.

ECOZEN YF 300 is obtained the GOLD Level for Cradle to Cradle (C2C) certification (the United States) and certified by the external environment-friendly products. SK Chemicals Company has obtained the GOLD Level as the world's first and only chemical resin supplier.

Key Attributes

- BPA / Phthalate free
- Excellent Heat Resistance
- Excellent Chemical & Stain Resistance
- Excellent Impact Strength
- High Flexural Strength
- High Transparency and Gloss
- Low Processing Temperature
- Less Residual Stress

Applications / Uses

- Food Container
- Airtight Container
- Baby Food Container
- Food Bowl
- Mixer & Blender
- Sports Bottle, Water Bottle, Juice Bottle etc.

※ Approvals

FDA : Food and Drug Administration

NSF : National Sanitation Foundation

EFSA : European Food Safety Authority

JHOSPA : Japan Hygienic Olefin and Styrene Plastics Association

NHFPC : National Health and Family Planning Commission

BEAT Analytic Inc. : ISO/IEC 17025:2005 Accredited Radiocarbon Dating Laboratory



Property	Test Method	Unit	Typical Values
Specific Gravity	ASTM D792	-	1.27
Mold Shrinkage (Parallel to Flow)	ASTM D955	%	0.2~0.5
Rockwell Hardness	ASTM D785	R-scale	119
Mechanical			
Tensile Strength @ Yield 50mm/min (2 inch/min)	ASTM D638	MPa (kgf/cm ²)	51 (520)
Tensile Strength @ Break 50mm/min (2 inch/min)	ASTM D638	MPa (kgf/cm ²)	44 (450)
Elongation @ Yield 50mm/min (2 inch/min)	ASTM D638	%	6.8
Elongation @ Break 50mm/min (2 inch/min)	ASTM D638	%	150
Flexural Strength 1.27mm/min (0.05 inch/min)	ASTM D790	MPa (kgf/cm ²)	87 (890)
Flexural Modulus 1.27mm/min (0.05 inch/min)	ASTM D790	MPa (kgf/cm ²)	2,180 (22,200)
Izod Impact Strength, Notched @ 23 °C(73 °F)	ASTM D256	J/m	No Break
Thermal			
Heat Distortion Temperature @ 0.455 MPa(66 psi)	ASTM D648	°C (°F)	100 (212)
Optical			
Haze	ASTM D1003	%	< 1.0
Transmittance	ASTM D1003	%	88
Flammability			
UL Flammability Classification @ 3.2mm thickness	UL94		V-2

