

ECOZEN® T90

SK Chemicals - Polyethylene Terephthalate Glycol Comonomer

General Information

Product Description

ECOZEN® is a glycol-modified polyethylene terephthalate (PETG) with exceptional transparency and chemical resistance. Due to plant-derived biomass components (Carbon-based 2%), ECOZEN® has more heat resistance compared to SKYGREEN® grades. ECOZEN® does not contain Bisphenol derivatives (BPA, etc.) and Phthalate-based plasticizer components regulated by the EU RoHS regulations. It also meets the requirements for food contact materials in Korea, the US, Europe, China, and Japan.

Applications

- Consumer Housewares
- Home Appliances
- Food and Beverage Packaging

Key Attributes

- High Heat Resistance
- Clarity

General

Features	<ul style="list-style-type: none"> • BPA Free • Chemical Resistant 	<ul style="list-style-type: none"> • Food Contact Acceptable • Good Heat Resistance 	<ul style="list-style-type: none"> • High Clarity
Uses	<ul style="list-style-type: none"> • Appliances • Beverage Packaging 	<ul style="list-style-type: none"> • Food Packaging • Household Goods 	
Appearance	<ul style="list-style-type: none"> • Clear/Transparent 		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.25		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	6830	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2
Tensile Strength (Break)	6970	psi	ASTM D638
Tensile Stress (Break)	7830	psi	ISO 527-2
Tensile Elongation (Yield)	5.8	%	ASTM D638
Tensile Strain (Yield)	5.3	%	ISO 527-2
Tensile Elongation (Break)	280	%	ASTM D638
Tensile Strain (Break)	230	%	ISO 527-2
Flexural Modulus	284000	psi	ASTM D790
Flexural Modulus	260000	psi	ISO 178
Flexural Strength	10200	psi	ASTM D790
Flexural Stress	9570	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	16	ft-lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	44	ft-lb/in ²	ISO 180
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	115		ASTM D785

ECOZEN® T90

SK Chemicals - Polyethylene Terephthalate Glycol Comonomer

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	172	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	178	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	154	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	154	°F	ISO 75-2/A
Optical	Nominal Value	Unit	Test Method
Light Transmittance	90.0	%	ASTM D1003
Haze	< 1.00	%	ASTM D1003