

# ECOZEN® T90D

## 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 Appliance
- Food and Beverage Packaging

#### Key Attributes

- High Heat Resistance
- Clarity
- Flowability

#### General

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

### Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.24		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	6340	psi	ASTM D638
Tensile Strength (Break)	6400	psi	ASTM D638
Tensile Elongation (Yield)	5.5	%	ASTM D638
Tensile Elongation (Break)	360	%	ASTM D638
Flexural Modulus	245000	psi	ASTM D790
Flexural Strength	9100	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	No Break		ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	167	°F	ASTM D648
Optical	Nominal Value	Unit	Test Method
Light Transmittance	90.0	%	ASTM D1003
Haze	< 1.00	%	ASTM D1003