

# ECOZEN® T120

## 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 10%), 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"> <li>• BPA Free</li> <li>• Chemical Resistant</li> </ul>	<ul style="list-style-type: none"> <li>• Food Contact Acceptable</li> <li>• Good Heat Resistance</li> </ul>	<ul style="list-style-type: none"> <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	1.27		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)	7680	psi	ASTM D638
Tensile Stress (Yield)	7400	psi	ISO 527-2
Tensile Strength (Break)	7890	psi	ASTM D638
Tensile Stress (Break)	7250	psi	ISO 527-2
Tensile Elongation (Yield)	7.1	%	ASTM D638
Tensile Strain (Yield)	6.3	%	ISO 527-2
Tensile Elongation (Break)	160	%	ASTM D638
Tensile Strain (Break)	130	%	ISO 527-2
Flexural Modulus	277000	psi	ASTM D790
Flexural Modulus	261000	psi	ISO 178
Flexural Strength	12400	psi	ASTM D790
Flexural Stress	11000	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 <sup>2</sup>	ISO 180
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	228	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	230	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	198	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	201	°F	ISO 75-2/A
Optical	Nominal Value	Unit	Test Method
Light Transmittance	81.0	%	ASTM D1003
Haze	< 1.00	%	ASTM D1003