

# SKYGREEN® K2012

## SK Chemicals - Polyethylene Terephthalate Glycol Comonomer

### General Information

#### Product Description

SKYGREEN® is a glycol-modified polyethylene terephthalate (PETG) with exceptional transparency, chemical resistance, and processability. Available in 4 unique grades, SKYGREEN®'s outstanding features make it an ideal choice for a variety of applications. K series offers excellent clarity and processability that makes it an attractive solution for versatile end-use applications. It 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. For further details, please refer to SK Chemicals' technical documents.

#### Applications

- Sheet
- Decorative Film
- Construction
- Food and Beverage Packaging
- Cosmetic Packaging
- General Packaging
- Others

#### Key Attributes

- Clarity
- Transparency
- Processability
- Bisphenol A Not Found

#### General

Features	<ul style="list-style-type: none"> <li>• BPA Free</li> <li>• Chemical Resistant</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent Processability</li> <li>• Food Contact Acceptable</li> </ul>	<ul style="list-style-type: none"> <li>• High Clarity</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Beverage Packaging</li> <li>• Construction Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Cosmetic Packaging</li> <li>• Film</li> </ul>	<ul style="list-style-type: none"> <li>• Food Packaging</li> <li>• Sheet</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>• Clear/Transparent</li> </ul>		
Forms	<ul style="list-style-type: none"> <li>• Pellets</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)	6470	psi	ASTM D638
Tensile Stress (Yield)	7110	psi	ISO 527-2
Tensile Strength (Break)	4270	psi	ASTM D638
Tensile Stress (Break)	4350	psi	ISO 527-2
Tensile Elongation (Yield)	4.5	%	ASTM D638
Tensile Strain (Yield)	4.1	%	ISO 527-2
Tensile Elongation (Break)	250	%	ASTM D638
Tensile Strain (Break)	240	%	ISO 527-2
Flexural Modulus	313000	psi	ASTM D790
Flexural Modulus	261000	psi	ISO 178
Flexural Strength	10700	psi	ASTM D790

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<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flexural Stress	9280	psi	ISO 178
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (73°F)	2.0	ft·lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	3.5	ft·lb/in <sup>2</sup>	ISO 180
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	108		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	158	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	162	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	144	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	144	°F	ISO 75-2/A
<b>Optical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Light Transmittance	90.0	%	ASTM D1003
Haze	< 1.00	%	ASTM D1003