

# SKYGREEN® PN200

## SK Chemicals - Polyethylene Terephthalate Glycol Comonomer

### General Information

#### Product Description

Available in 4 unique grades, SKYGREEN®'s outstanding features make it an idea choice for a variety of applications. SKYGREEN® PN series offers combination of great clarity and flowability that makes it suitable for injection molding intricate designs with small and thin parts. Among other SKYGREEN® grades, PN200 has outstanding flowability. SKYGREEN® PN 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

- Cosmetic Packaging
- Skin Care Packaging (Bottles, Jars)
- Color Cosmetics Packaging
- Consumer Housewares
- Home Appliances
- Food and Beverage Packaging
- Stationery
- Others

#### Key Attributes

- Clarity
- Chemical Resistance
- 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>• High Clarity</li> </ul>	<ul style="list-style-type: none"> <li>• High Flow</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Appliances</li> <li>• Beverage Packaging</li> <li>• Bottles</li> </ul>	<ul style="list-style-type: none"> <li>• Cosmetic Packaging</li> <li>• Food Packaging</li> <li>• Household Goods</li> </ul>	<ul style="list-style-type: none"> <li>• Stationary Supplies</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>		
Processing Method	<ul style="list-style-type: none"> <li>• Injection Molding</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)	6680	psi	ASTM D638
Tensile Stress (Yield)	7110	psi	ISO 527-2
Tensile Strength (Break)	6680	psi	ASTM D638
Tensile Stress (Break)	3340	psi	ISO 527-2
Tensile Elongation (Yield)	4.5	%	ASTM D638
Tensile Strain (Yield)	4.1	%	ISO 527-2
Tensile Elongation (Break)	120	%	ASTM D638
Tensile Strain (Break)	40	%	ISO 527-2
Flexural Modulus	275000	psi	ASTM D790

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<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flexural Modulus	274000	psi	ISO 178
Flexural Strength	10200	psi	ASTM D790
Flexural Stress	9720	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)	3.3	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)	105		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