

SKYGREEN® PN400

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, PN400 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"> • BPA Free • Chemical Resistant 	<ul style="list-style-type: none"> • Food Contact Acceptable • High Clarity 	<ul style="list-style-type: none"> • High Flow
Uses	<ul style="list-style-type: none"> • Appliances • Beverage Packaging • Bottles 	<ul style="list-style-type: none"> • Cosmetic Packaging • Food Packaging • Household Goods 	<ul style="list-style-type: none"> • Stationary Supplies
Appearance	<ul style="list-style-type: none"> • Clear/Transparent 		
Forms	<ul style="list-style-type: none"> • Pellets 		
Processing Method	<ul style="list-style-type: none"> • Injection Molding 		

Properties ¹

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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Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus	274000	psi	ISO 178
Flexural Strength	10200	psi	ASTM D790
Flexural Stress	9720	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	2.0	ft-lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	3.3	ft-lb/in ²	ISO 180
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	105		ASTM D785
Thermal	Nominal Value	Unit	Test Method
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
Optical	Nominal Value	Unit	Test Method
Light Transmittance	90.0	%	ASTM D1003
Haze	< 1.00	%	ASTM D1003