

ECOTRIA R100

ECOTRIA

Product description

ECOTRIA® R series is a semi-crystalline Copolyester grade consisting of 30% of Post-Consumer Recycled (PCR) materials. Articles manufactured with ECOTRIA® meet the definition of polyethylene terephthalate as ASTM-D7611- 20, and thus recyclable in the PET recycling stream. PCR materials in ECOTRIA® are from meticulously selected PET bottles. It is capable of expressing excellent transparency and color by removing contaminants through the second recycling process that received the No Objection Letter (No. 140) from the US Food and Drug Administration (FDA). No harmful substances regulated by the EU SVHC and RoHS regulations were detected in the ECOTRIA® R series when tested through a third-party institution. It also meets the requirements for food contact materials in Korea, the US, Europe, China, and Japan.

Applications

- Cosmetic Packaging
- Food and Beverage Packaging

Key Attributes

- PCR Material (30%)
- Clarity
- Chemical Resistance
- Slow Crystallization Rate

Notes

The data listed here is preliminary data sheet of product. Therefore this sheet should not be used to establish specification limits or used alone as a basis for design. This information is not intended as a warranty of any kind. Customers must make their own representative test and assume all risks of use, whether used alone or in combination with other products. SK Chemicals assumes no obligation or liability of any advice furnished by it or results obtained with respect to these products. All warranties of merchantability for a particular purpose or use are excluded and disclaimed.

Typical properties for

ECOTRIA R100

ASTM Method

Product Information

Property	Test Method	Unit	Result
Specific Gravity	ASTM D792	-	1.32
Mold Shrinkage	ASTM D955	%	0.2 ~ 0.5
Rockwell Hardness	ASTM D785	R-scale	> 115
Tensile Strength @ Yield	ASTM D638	Kgf/cm2	545
Tensile Strength @ Break	ASTM D638	Kgf/cm2	400
Elongation @ Yield	ASTM D638	%	4.7
Elongation @ Break	ASTM D638	%	425
Flexural Strength	ASTM D790	Kgf/cm2	785
Flexural Modulus	ASTM D790	Kgf/cm2	23,500
Izod Impact Strength Notched @ 23°C	ASTM D256	J/m	60
Heat Distortion Temperature @ 0.455 MPa / @ 1.820 MPa	ASTM D648	°C	72/-
Haze	ASTM D1003	%	< 3.0
Transmittance	ASTM D1003	%	> 86

Headquarter / R&D center

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The information in this data sheet is, to the best of our knowledge, true and accurate. The representations about the product are based upon test results achieved under laboratory practices supervised and controlled by SK chemicals corporation.

Typical properties for

ECOTRIA R100

ISO Method

Product Information

Property	Test Method	Unit	Result
Specific Gravity	ISO 1183	-	1.32
Mold Shrinkage	D955	%	0.2 ~ 0.5
Rockwell Hardness	ISO 2039-2	R-scale	> 115
Tensile Strength @ Yield	ISO 527	MPa	54
Tensile Strength @ Break	ISO 527	MPa	24
Elongation @ Yield	ISO 527	%	4.2
Elongation @ Break	ISO 527	%	110
Flexural Strength	ISO 178	MPa	75
Flexural Modulus	ISO 178	MPa	2,200
Izod Impact Strength Notched @ 23 °C	ISO 180	KJ/m2	5.0
Heat Distortion Temperature @ 0.455 MPa / @ 1.820 MPa	ISO 75	°C	72/ -
Haze	D1003	%	< 3.0
Transmittance	D1003	%	> 86

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