

Technical Data Sheet

ECOTRIA R200

**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.

Ver.1, '20.08.10

Typical properties for

ECOTRIA R200

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	510
Tensile Strength @ Break	ASTM D638	Kgf/cm2	400
Elongation @ Yield	ASTM D638	%	5
Elongation @ Break	ASTM D638	%	400
Flexural Strength	ASTM D790	Kgf/cm2	780
Flexural Modulus	ASTM D790	Kgf/cm2	24,000
Izod Impact Strength Notched @ 23°C	ASTM D256	J/m	60
Heat Distortion Temperature @ 0.455 MPa / @ 1.820 MPa	ASTM D648	°C	70/-
Haze	ASTM D1003	%	< 2.0
Transmittance	ASTM D1003	%	> 85

Headquarter / R&D center

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Typical properties for

ECOTRIA R200

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	50
Tensile Strength @ Break	ISO 527	MPa	20
Elongation @ Yield	ISO 527	%	4.2
Elongation @ Break	ISO 527	%	200
Flexural Strength	ISO 178	MPa	73
Flexural Modulus	ISO 178	MPa	2,100
Izod Impact Strength Notched @ 23°C	ISO 180	KJ/m2	5.5
Heat Distortion Temperature @ 0.455 MPa / @ 1.820 MPa	ISO 75	°C	71/ -
Haze	D1003	%	< 2.0
Transmittance	D1003	%	> 85

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