

Technical Data Sheet

Clyrell RC110E



Polypropylene, Specialty Products

Product Description

Clyrell RC110E is a polypropylene random copolymer; it does not contain slip or anti-block additives and it is Calcium Stearate free.

Clyrell RC110E is designed for the production of blown, oriented and cast film. It is used by customers for a broad range of applications including textiles.

Regulatory Status

For regulatory compliance information, see Clyrell RC110E [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Europe
Application	Food Packaging Film; Hygiene Film; Lamination Film; Shrink Film; Surface Protection Film; Textile Packaging Film
Processing Method	Blown Film; BOPP; Cast Film; Double Bubble

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	0.8	g/10 min	ISO 1133-1
Density	0.90	g/cm ³	ISO 1183-1
Mechanical			
Flexural Modulus	500	N/mm ²	ISO 178
Tensile Stress at Break, (23 °C, 50 mm/min)	27	N/mm ²	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	19.5	N/mm ²	ISO 527-1, -2
Tensile Strain at Break, (23 °C, 50 mm/min)	420	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	16.5	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	80	kJ/m ²	ISO 179-1/1eA
(0 °C, Type 1, Edgewise, Notch A)	7.5	kJ/m ²	ISO 179-1/1eA
Thermal			
Vicat Softening Temperature, (A50)	118	°C	ISO 306

Notes

- ▶ Typical film properties measured on 50 micron B.U.R. 3 blown film extruded on a three layers lab scale line without IBC. Die diameter 80 mm, die gap 0.8 mm.

Clarity	%	ASTM D1746	82
Haze	%	ASTM D1003	21
Gloss @ 45°	GU	ASTM D2457	32
DART TEST	GU	ASTM D1709	80
Tensile modulus MD	MPa	ASTM D882	735
Tensile modulus TD	MPa	ASTM D882	700
Stress @ yield MD	MPa	ASTM D882	27
Strain @ yield MD	%	ASTM D882	15
Stress @ break MD	MPa	ASTM D882	52
Strain @ break MD	%	ASTM D882	940
Stress @ yield TD	MPa	ASTM D882	25
Strain @ yield TD	%	ASTM D882	12
Stress @ break TD	MPa	ASTM D882	46
Strain @ break TD	%	ASTM D882	30
Tear Elmendorf MD	g	ASTM D1922	38
Tear Elmendorf TD	g	ASTM D1922	56

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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