Technical Data Sheet

Circulen Renew C14 LD2420D



Low Density Polyethylene

Product Description

*Circulen*Renew C14 LD2420 D is part of the *Circulen* product family of circular and sustainable solutions. *Circulen*Renew C14 polymer reduces the carbon footprint as it replaces fossil feedstock through using renewable raw materials made from bio-based waste and residue oils. The renewable content of *Circulen*Renew C14 is measured by an accredited third party laboratory and stated as a parameter on the Certificate of Analysis (CoA).

*Circulen*Renew C14 LD2420 D is a drop-in solution and therefore doesn't require any adaptation of the existing processing equipment.

*Circulen*Renew C14 LD2420 D is a non-additivated, low density polyethylene. It is characterized by a high melt strength leading to a good bubble stability during blown film extrusion. It is delivered in pellet form.

This product is not intended for use in medical and pharmaceutical applications.

Application	Agriculture Film; Bags & Pouches; Heavy Duty Packaging; Liner Film; Shrink Film; Stretch Hood
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	General Purpose; Good Processability; Good Tear Strength; Good Toughness

	Nominal		
Typical Properties	Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	0.25	g/10 min	ISO 1133-1
Density	0.923	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	260	MPa	ISO 527-1, -2
Tensile Stress at Yield	10	MPa	ISO 527-1, -2
Film			
Dart Drop Impact Strength, F50	250	g	ASTM D1709
Tensile Strength			
MD	27	MPa	ISO 527-1, -3
TD	25	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	200	%	ISO 527-1, -3
TD	500	%	ISO 527-1, -3
Coefficient of Friction	>0.8		ISO 8295
Impact			





Failure Energy	6.5	J/mm	DIN 53373
Film thickness: 70 μm			
Thermal			
Vicat Softening Temperature, (A/50 N)	96	°C	ISO 306
Peak Melting Point	110	°C	ISO 11357-3
Optical			
Haze, (50 μm)	<14	%	ASTM D1003
Gloss			
(20°)	>15		ASTM D2457
(60°)	>50		ASTM D2457
Additional Information			
Test Specimen	Film		
Film properties tested using 50 μ m thickness blow	vn film extruded at a melt temp	perature of 180°C a	nd a blow-up ratio of 2.5:1.
Processing Parameters			
Extrusion Temperature	170-220	°C	

Notes

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



