Technical Information

CEFOR™ 1211P
Linear Low Density Polyethylene Resin

Overview

CEFOR 1211P is a butene Linear Low Density Polyethylene for general blown film applications.

Main Characteristics:

- Used in Industrial, Food & Specialty Packaging
- Better optics and processability
- Better color stability
- Good sealing performance

Complies with:

- U.S. FDA 21 177.1520 (c) 3.2a
- EU. No 10/2011

Consult the regulations for complete details.

Additive:

- Antiblock: No
- Slip: No
- Processing Aid: No

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- Slip: No
- Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.918	g/cm³	0.918	g/cm³	ASTM D792
Base Density [1]	0.918	g/cm³	0.918	g/cm³	Dow Method
Melt Mass-Flow Rate (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ISO 1133
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	2	mil	51	µm	
Film Puncture Resistance (2.0 mil (51 µm))	99.0	ft·lb/in³	8.19	J/cm³	Dow Method
Secant Modulus					ASTM D882
2% Secant, MD : 2.0 mil (51 µm)	26600	psi	183	MPa	
2% Secant, TD : 2.0 mil (51 µm)	31500	psi	217	MPa	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (51 µm)	1500	psi	10.3	MPa	
TD : Yield, 2.0 mil (51 µm)	1600	psi	11.0	MPa	
MD : Break, 2.0 mil (51 µm)	4600	psi	31.7	MPa	
TD : Break, 2.0 mil (51 µm)	3630	psi	25.0	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (51 µm)	660	%	660	%	
TD : Break, 2.0 mil (51 µm)	710	%	710	%	
Dart Drop Impact (2.0 mil (51 µm))	100	g	100	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (51 µm)	110	g	110	g	
TD : 2.0 mil (51 µm)	260	g	260	g	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	214	°F	101	°C	ASTM D1525
Melting Temperature (DSC)	241	°F	116	°C	Dow Method
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss (20°, 2.00 mil (50.8 µm))	69		69		ASTM D2457
Haze (2.00 mil (50.8 µm))	11.0	%	11.0	%	ASTM D1003

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Manufacturer website: https://www.dow.com/en-us/market/mkt-polyethylene.html

Extrusion Notes

Fabrication Conditions For Blown Film:

- Melt Temperature: 440°F (227°C)
- Die Gap: 70mil (1.8mm)
- Output: 120 lb/hr (55 Kg/hr)
- Blow Up Ratio: 2.5:1
- Frost Line Height: 28 in. (71 cm)

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

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