Technical Information

CEFOR™ 1050P
Linear Low Density Polyethylene Resin

Overview

CEFOR 1050P is a Linear Low Density Polyethylene Resin 1-Butene copolymer, produced in the Solution process. This resin is designed to be used in cast extrusion to produce films for stretch and health & hygiene applications.

Complies with:

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

Consult the regulation 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	0.916	g/cm³	0.916	g/cm³	ASTM D792
Base Density [1]	0.916	g/cm³	0.916	g/cm³	Dow Method
Melt Mass-Flow Rate (190°C/2.16 kg)	3.0	g/10 min	3.0	g/10 min	ISO 1133
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	1	mil	24	µm	
Film Puncture Resistance (0.94 mil (24 µm))	134	ft·lb/in³	11.1	J/cm³	Dow Method
Secant Modulus					ASTM D882
2% Secant, MD : 0.94 mil (24 µm)	28100	psi	194	MPa	
2% Secant, TD : 0.94 mil (24 µm)	25200	psi	174	MPa	
Tensile Strength					ASTM D882
MD : Yield, 0.94 mil (24 µm)	4870	psi	33.6	MPa	
TD : Yield, 0.94 mil (24 µm)	2630	psi	18.1	MPa	
MD : Break, 0.94 mil (24 µm)	870	psi	6.00	MPa	
TD : Break, 0.94 mil (24 µm)	754	psi	5.20	MPa	
Tensile Elongation					ASTM D882
MD : Break, 0.94 mil (24 µm)	560	%	560	%	
TD : Break, 0.94 mil (24 µm)	870	%	870	%	
Dart Drop Impact (0.94 mil (24 µm))	50	g	50	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 0.94 mil (24 µm)	52	g	52	g	
TD : 0.94 mil (24 µm)	260	g	260	g	
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss (45°, 0.940 mil (23.9 µm))	93		93		ASTM D2457
Haze (0.940 mil (23.9 µm))	0.940	%	0.940	%	ASTM D1003

Extrusion Notes

Processing Conditions for cast film analyzed:

- Die gap: 31.5 mil (0.8 mm)
- Melt Temperature: 455°F (235°C)
- Chill Roll Temperature: 64.4°F (18°C)
- Haul Off Speed: 15 m/min

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

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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