Technical Information

CEFOR™ 1220P
Linear Low Density Polyethylene Resin

Overview

CEFOR 1220P is a butene Linear Low Density Polyethylene for general blown film extrusion film applications.

Main Characteristics:

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

Complies with:

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

Consult the regulations for complete details.

Additive:

- Antiblock: 2000
- Slip: 1200
- Processing Aid: No

Additive

- Antiblock: 2000 ppm
- Slip: 1200 ppm
- Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.919	g/cm³	0.919	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)	2.0	g/10 min	2.0	g/10 min	ISO 1133
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	2	mil	38	µm	
Film Puncture Resistance (1.5 mil (38 µm))	60.4	ft·lb/in³	5.00	J/cm³	Dow Method
Secant Modulus					ASTM D882
2% Secant, MD : 1.5 mil (38 µm)	21800	psi	150	MPa	
2% Secant, TD : 1.5 mil (38 µm)	21000	psi	145	MPa	
Tensile Strength					ASTM D882
MD : Yield, 1.5 mil (38 µm)	1450	psi	10.0	MPa	
TD : Yield, 1.5 mil (38 µm)	1450	psi	10.0	MPa	
MD : Break, 1.5 mil (38 µm)	4790	psi	33.0	MPa	
TD : Break, 1.5 mil (38 µm)	3630	psi	25.0	MPa	
Tensile Elongation					ASTM D882
MD : Break, 1.5 mil (38 µm)	950	%	950	%	
TD : Break, 1.5 mil (38 µm)	1100	%	1100	%	
Dart Drop Impact (1.5 mil (38 µm))	140	g	140	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 1.5 mil (38 µm)	220	g	220	g	
TD : 1.5 mil (38 µm)	330	g	330	g	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	206	°F	96.7	°C	ASTM D1525
Melting Temperature (DSC)	241	°F	116	°C	Dow Method
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss (45°, 1.50 mil (38.1 µm))	53		53		ASTM D2457
Haze (1.50 mil (38.1 µm))	13.0	%	13.0	%	ASTM D1003

Extrusion Notes

Fabrication Conditions For Blown Film:

- Melt Temperature: 428°F (206°C)
- Die Gap: 70mil (1.8mm)
- Output: 120 lb/hr (54kg/fr)
- Blow-Up Ratio: 2.5:1

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.