



PRIMACOR™ 1321

SK Global Chemical - Ethylene Acrylic Acid Copolymer

Sunday, November 3, 2019

General Information

Product Description

PRIMACOR™ 1321 Copolymer is an ethylene acrylic acid copolymer suitable for extruded blown and cast film.

PRIMACOR 1321 Copolymer has been specifically designed for use as an adhesive layer in composite films or sealant layer in flexible packaging structures.

PRIMACOR 1321 Copolymer exhibits:

- Good interlayer adhesion to PE and PA
- Good optical properties
- Excellent toughness and strength
- Excellent environmental stress crack and product resistance
- Good hot-tack and sealability
- Insensitivity to moisture

Applications:

- Multilayer films
- Food packaging

Complies with:

- U.S. FDA 21 CFR 177.1310(a)(1)
- EU, No 10/2011

Consult the regulations for complete details.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1310 (a) 1	
Forms	• Pellets		
Processing Method	• Blown Film	• Cast Film	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.937		ASTM D792
Density	0.935	g/cm ³	ISO 1183/A
Melt Mass-Flow Rate ² (190°C/2.16 kg)	2.6	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) ² (190°C/2.16 kg)	2.6	g/10 min	ISO 1133
Comonomer Content ³	6.5	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ⁴ (Yield, Compression Molded)	1460	psi	ASTM D638
Tensile Stress (Yield, Compression Molded)	1460	psi	ISO 527-2/508
Tensile Strength ⁴ (Break, Compression Molded)	2910	psi	ASTM D638
Tensile Stress (Break, Compression Molded)	2910	psi	ISO 527-2/508
Tensile Elongation ⁴ (Break, Compression Molded)	640	%	ASTM D638
Tensile Strain (Break, Compression Molded)	640	%	ISO 527-2/508

PRIMACOR™ 1321

SK Global Chemical - Ethylene Acrylic Acid Copolymer

Films	Nominal Value	Unit	Test Method
Tensile Strength - MD (Yield, 2.0 mil)	1640	psi	ASTM D882
Tensile Strength - TD (Yield, 2.0 mil)	1620	psi	ASTM D882
Tensile Stress			ISO 527-3
MD : Yield, 2.0 mil	1640	psi	
TD : Yield, 2.0 mil	1670	psi	
Tensile Strength - MD (Break, 2.0 mil)	4610	psi	ASTM D882
Tensile Strength - TD (Break, 2.0 mil)	4620	psi	ASTM D882
Tensile Stress			ISO 527-3
MD : Break, 2.0 mil	4610	psi	
TD : Break, 2.0 mil	4620	psi	
Tensile Elongation - MD (Break, 2.0 mil)	460	%	ASTM D882
Tensile Elongation - TD (Break, 2.0 mil)	510	%	ASTM D882
Tensile Elongation			ISO 527-3
MD : Break, 2.0 mil	460	%	
TD : Break, 2.0 mil	510	%	
Dart Drop Impact (2.0 mil)	410	g	ASTM D1709B
Dart Drop Impact (2.0 mil)	410	g	ISO 7765-1/B
Elmendorf Tear Strength - MD ³ (2.0 mil)	270	g	ASTM D1922
Elmendorf Tear Strength - TD ³ (2.0 mil)	390	g	ASTM D1922
Elmendorf Tear Strength ³			ISO 6383-2
MD : 2.0 mil	270	lbf	
TD : 2.0 mil	390	lbf	
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	192	°F	ASTM D1525
Vicat Softening Temperature	192	°F	ISO 306
Melting Temperature (DSC)	217	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 2.00 mil)	76		ASTM D2457
Haze			
2.00 mil	3.70	%	ISO 14782
2.00 mil	3.70	%	ASTM D1003

Processing Information

Extrusion Notes

Fabrication Conditions For Film:

Equipment used to process this resin should be constructed of corrosion resistant materials. Dies and adapters are recommended to be stainless steels and/or duplex chrome or nickel plated.

- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D
- Screw Type: Single Flight with Maddock Mixer
- Die Gap: 40 mil (1.0 mm)
- Melt Temperature: 380°F (193°C)
- Output: 6 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5:1
- Frost Line Height: 29 in. (737 mm)

PRIMACOR™ 1321

SK Global Chemical - Ethylene Acrylic Acid Copolymer

Notes

¹ Typical properties: these are not to be construed as specifications.

² As measured at the time of production.

³ Comonomer content measured by a proprietary method that has equivalent accuracy as compared to ASTM D 4094.

⁴ 20 in/min