



PRIMACOR™ 3440

SK Global Chemical - Ethylene Acrylic Acid Copolymer

Sunday, November 3, 2019

General Information

Product Description

PRIMACOR™ 3440 Copolymer resin is an ethylene acrylic acid copolymer suitable for extrusion coating and extrusion lamination applications.

PRIMACOR 3440 Copolymer exhibits:

- Excellent heat sealability and hot tack.
- Excellent adhesion to metallic, paper and PE substrates
- Excellent toughness
- Excellent stress crack resistance
- Insensitivity to moisture
- Designed specifically for high line speeds

Applications:

- Flexible packaging laminates
- Liquid packaging laminates

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	• Latin America • 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	• Extrusion Coating		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.940		ASTM D792
Density	0.938	g/cm ³	ISO 1183
Melt Mass-Flow Rate (190°C/2.16 kg)	11	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	11	g/10 min	ISO 1133
Comonomer Content ²	9.7	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, Compression Molded)	1150	psi	ASTM D638
Tensile Stress (Yield, Compression Molded)	1150	psi	ISO 527-2
Tensile Strength (Break, Compression Molded)	2550	psi	ASTM D638
Tensile Stress (Break, Compression Molded)	2550	psi	ISO 527-2
Tensile Elongation (Break, Compression Molded)	600	%	ASTM D638
Tensile Strain (Break, Compression Molded)	600	%	ISO 527-2
Films	Nominal Value	Unit	Test Method
Seal Initiation Temperature ³	185	°F	Internal Method

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Films	Nominal Value	Unit	Test Method
Water Vapor Transmission Rate (100°F, 90% RH)	1.1	g·mil/100in ² /atm/24 hr	DIN 53122/2
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	178	°F	ASTM D1525
Vicat Softening Temperature	178	°F	ISO 306
Melting Temperature (DSC)	208	°F	Internal Method

Processing Information

Extrusion	Nominal Value	Unit	Test Method
Melt Temperature	500 to 554	°F	
Minimum Coating Thickness	0.40	mil	Internal Method
Minimum Coating Weight	6.0	lb/ream	Internal Method
Neck-in (550°F, 1.0 mil)	2.6	in	Internal Method

Extrusion Notes

Fabrication Conditions For Extrusion Coating 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: 3.5 in. (89 mm); 30:1 L/D
- Die: 30 inch die deckled to 24 inches
- Die Gap: 20 mil (0.508 mm)
- Melt Temperature: 550°F (288°C)
- Output: 250 lb/hr
- Air Gap: 6 in. (152 mm)

Notes

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

² Comonomer content measured by a proprietary method that has equivalent accuracy as compared to ASTM D 4094.

³ 25 g/m² coatings at 290°C set temperature.