PRIMACOR™ 3440

Copolymer

Introduction

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

PRIMACOR™ 3440 Copolymer exhibits:

- Excellent adhesion to paper, paperboard, metals and polyethylenes
- Excellent hot-tack and sealability
- Excellent toughness
- Excellent stress crack resistance
- Insensitivity to moisture
- Designed specifically for high line speeds

Applications:

- Flexible packaging laminates
- Liquid packaging board laminates

Complies with:

- US. FDA 21 CFR 177.1310(a)(1)
- EU. No 10/2011

Additives:

- Antiblock: No
- Slip: No

Properties

		Nominal Value (English)	Nominal Value (SI)	Test Method
Resin Properties	Density	0.938 g/cm^3	0.938 g/cm^3	ASTM D792 ISO 1183
	Melt Index (2.16 kg @190°C)	10 g/10min	10 g/10min	ASTM D1238 ISO 1133
	Comonomer Content[1]	9.7 %	9.7 %	SK Method
	Vicat Softening Temperature	178 °F	81.1 °C	ASTM D1525 ISO 306/A
	Melting Temperature (DSC)	208 °F	97.8 °C	SK Method
Film Properties	Seal Initiation Temperature[2]	185 °F	85.0 °C	SK Method
	Water Vapor Transmission Rate 100°F (38°C), 90% RH	1.1 g·mil/100in^2/atm/24hr	0.41 g·mm/m^2/atm/24hr	DIN 53122/2

		Nominal Value (English)	Nominal Value (SI)	Test Method
Mechanical Properties	Tensile Strength at Yield (Compression Molded)	1150 psi	7.93 Mpa	ASTM D638 ISO 527-2
	Tensile Strength at Break (Compression Molded)	2550 psi	17.6 Mpa	ASTM D638 ISO 527-2
	Tensile Elongation at Break (Compression Molded)	600 %	600 %	ASTM D638 ISO 527-2
Extrusion	Melt Temperature	500-554 °F	260-290 °C	-
	Minimum Coating Thickness	0.40 mil	10 μm	SK Method
	Minimum Coating Weight	6.0 lb/ream	9.8 g/m^2	SK Method
	Neck-in (550°F (288°C), 1.0 mil (25.4 μm))	2.6 in	66.0 mm	SK Method
Extrusion Condition[3]	• Screw Size: 3.5 in. (89 mm); 30:1 L/D • Die Gap: 20 mil (0.508 mm) • Die: 30 inch (762 mm) die deckled to 24 inches (609.6 mm) • Melt Temperature: 550 °F (288 °C) • Output: 250 lb/hr (113.4 kg/hr) • Air Gap: 6 in. (152 mm)			

[1] Comonomer content measured by a SK proprietary method that has equivalent accuracy as compared to ASTM D 4094.
[2] 25g/m^2 coatings at 290°C set temperature.
[3] 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.

Notes
These are ***typical values*** and are ***not be construed as specifications.*** The physical properties are highly dependent on the manufacturing conditions. So customers should confirm performances by their own tests.