



PRIMACOR™ 3004 Copolymer

Overview

PRIMACOR™ 3004 is an ethylene acrylic acid copolymer designed for extrusion/coextrusion coating and laminating. It provides excellent hot tack and adhesion to metallic, paper and polyethylene substrates with excellent heat seal strength, even through many oil and powdered products. This resin also offers outstanding resistance to delamination, as well as excellent toughness and environmental stress crack resistance (ESCR).

- Excellent draw down and edge stability
- Excellent product resistance
- Excellent hot tack, heat seal, toughness
- High performance sealant or tie layer

Complies with:

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

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.938 g/cm ³	0.938 g/cm ³	ASTM D792 ISO 1183
Melt Index (190°C/2.16 kg)	8.5 g/10 min	8.5 g/10 min	ASTM D1238 ISO 1133
Comonomer Content	9.7 %	9.7 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638 ISO 527-2
Yield, Compression Molded	1150 psi	7.93 MPa	
Break, Compression Molded	2550 psi	17.6 MPa	
Tensile Elongation			ASTM D638 ISO 527-2
Break, Compression Molded	600 %	600 %	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	178 °F	81.1 °C	ASTM D1525 ISO 306
Melting Temperature (DSC)	208 °F	98.0 °C	Dow Method
Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Temperature	500 to 554 °F	260 to 290 °C	
Minimum Coating Thickness	0.40 mil	10 µm	Dow Method
Minimum Coating Weight	6.0 lb/ream	9.8 g/m ²	Dow Method
Neck-in (550°F (288°C), 1.0 mil (25.4 µm))	2.0 in	50.8 mm	Dow 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

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Comonomer content measured by a DOW proprietary method that has equivalent accuracy as compared to ASTM D 4094.

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