



PRIMACOR™ 4608 Copolymer

Overview PRIMACOR™ 4608 Copolymer is an ethylene acrylic acid copolymer suitable for extrusion coating and extrusion lamination applications.

PRIMACOR 4608 Copolymer has been specifically designed for use as a sealant and adhesive layer for flexible packaging and liquid packaging laminates.

PRIMACOR 4608 Copolymer exhibits:

- Excellent adhesion to metallic, paper, and PE substrates.
- Excellent heat sealability and hot-tack.
- Excellent draw down.
- Good oil grease resistance.
- Insensitivity to moisture.

Note:

PRIMACOR 4608 Copolymer should comply with FDA regulation 177.1310 and with most European food contact regulations when used unmodified and processed according to good manufacturing practices for food contact applications. Please contact your nearest office regarding food contact compliance statements. The purchaser remains responsible for determining whether the use complies with all relevant regulations.

Applications:

- Flexible packaging laminates.
- Liquid packaging board laminates.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.934 g/cm ³	0.934 g/cm ³	ASTM D792 ISO 1183
Melt Index (190°C/2.16 kg)	7.8 g/10 min	7.8 g/10 min	ISO 1133 ASTM D1238 ¹
Comonomer Content	6.5 %	6.5 %	Dow Method ²
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638 ISO 527-2
Yield, Compression Molded	1080 psi	7.45 MPa	
Break, Compression Molded	2880 psi	19.9 MPa	
Tensile Elongation			ASTM D638 ISO 527-2
Break, Compression Molded	590 %	590 %	
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Seal Initiation Temperature	194 °F	90.0 °C	Dow Method ³
Water Vapor Transmission Rate 100°F (38°C), 90% RH	0.95 g·mil/100in ² /at m/24 hr	0.37 g·mm/m ² /atm/ 24 hr	DIN 53122/2
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	187 °F	86.1 °C	ASTM D1525 ISO 306
Melting Temperature (DSC)	210 °F	98.9 °C	Dow Method

Additional Information

Specific test settings in accordance to Inter Laboratory Round Robin programs with method priorities for ISO/ASTM.

Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Temperature	500 to 554 °F	260 to 290 °C	
Minimum Coating Thickness	0.350 mil	0.350 mil	Dow Method
Minimum Coating Weight	5.3 lb/ream	8.6 g/m ²	Dow Method
Neck-in			Dow Method
550°F (288°C), 0.00100 in (0.0254 mm)	3.3 in	8.4 cm	

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 Gap: 20 mil (0.508 mm)
- Die: 30 inch die deckled to 24 inches
- 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 As measured at the time of production.

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

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

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