

# PRIMACOR™ 4608

## Copolymer

### Introduction

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

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
<b>Resin Properties</b>	Density	0.934 g/cm <sup>3</sup>	0.934 g/cm <sup>3</sup> ASTM D792 ISO 1183
	Melt Index (2.16 kg @190°C)	7.8 g/10min	7.8 g/10min ASTM D1238 ISO 1133
	Comonomer Content <sup>1</sup>	6.5 %	6.5 % SK Method
	Vicat Softening Temperature	187 °F	86.1 °C ASTM D1525 ISO 306
	Melting Temperature (DSC)	210 °F	98.9 °C SK Method

*Technical Information*

		Nominal Value (English)	Nominal Value (SI)	Test Method
<b>Film Properties</b>	Seal Initiation Temperature <sup>2</sup>	194 °F	90.0 °C	SK Method
	Water Vapor Transmission Rate 100 °F (38 °C), 90% RH	0.95 g·mil/100in <sup>2</sup> /atm/24hr	0.37 g·mm/m <sup>2</sup> /atm/24hr	DIN 53122/2
<b>Mechanical Properties</b>	Tensile Strength at Yield (Compression Molded)	1080 psi	7.45 MPa	ASTM D638 ISO 527-2
	Tensile Strength at Break (Compression Molded)	2880 psi	19.9 MPa	ASTM D638 ISO 527-2
	Tensile Elongation at Break (Compression Molded)	590 %	590 %	ASTM D638 ISO 527-2
<b>Extrusion</b>	Melt Temperature	500 - 554 °F	260 - 290 °C	
	Minimum Coating Thickness	0.35 mil	8.9 µm	SK Method
	Minimum Coating Weight	5.3 lb/ream	8.6 g/m <sup>2</sup>	SK Method
	Neck-in <sup>3</sup>	3.3 in.	83.8 mm	SK Method
<b>Extrusion Condition<sup>4</sup></b>	<ul style="list-style-type: none"> <li>• Screw Size: 3.5 in. (89 mm); 30:1 L/D</li> <li>• Die Gap: 20 mil (0.508 mm)</li> <li>• Die: 30 in. (762 mm) die deckled to 24 in. (609.6 mm)</li> <li>• Melt Temperature: 550 °F (288 °C)</li> <li>• Output: 250 lb/hr (113.4 kg/hr)</li> <li>• Air Gap: 6 in. (152 mm)</li> </ul>			

<sup>1</sup> Comonomer content measured by a SK proprietary method that has equivalent accuracy as compared to ASTM D 4094.

<sup>2</sup> 25 g/m<sup>2</sup> coatings at 290 °C set temperature.

<sup>3</sup> 550 °F (288 °C), 1.0 mil (25.4 µm)

<sup>4</sup> 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.

*Technical Information*

*For additional sales, order and technical assistance*

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