

# PRIMACOR™ 3004

## Copolymer

### Introduction

PRIMACOR™ 3004 Copolymer is an ethylene acrylic acid copolymer which has been specifically designed by SK for use as an adhesive or sealant layer in extrusion/coextrusion coating and lamination.

PRIMACOR™ 3004 Copolymer exhibits:

- Excellent draw-down and edge stability
- Adhesion to paper, paperboard, metals and polyethylenes
- High performance sealant or tie layer
- Excellent hot-tack and sealability
- Excellent seal through contamination
- Excellent product resistance
- Excellent toughness and strength
- Outstanding environmental stress crack and product resistance

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	0.938 g/cm <sup>3</sup>	ASTM D792 ISO 1183
	Melt Index (2.16 kg @190°C)	8.5 g/10min	ASTM D1238 ISO 1133
	Comonomer Content <sup>1</sup>	9.7 %	SK Method
	Vicat Softening Temperature	178 °F	ASTM D1525 ISO 306/A
	Melting Temperature (DSC)	208 °F	98.0 °C SK Method



	Nominal Value (English)	Nominal Value (SI)	Test Method
<b>Mechanical Properties</b>	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
<b>Extrusion</b>	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 <sup>2</sup> SK Method
	Neck-in <sup>3</sup> (550°F (288°C), 1.0 mil (25.4 µm))	2.0 in	50.8 mm SK Method
<b>Extrusion Condition<sup>2</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 inch (762 mm) die deckled to 24 inches (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> 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.

