

# PRIMACOR™ 3150

## Copolymer

### Introduction

PRIMACOR™ 3150 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™ 3150 Copolymer exhibits:

- Excellent adhesion to paper, paperboard, metals and polyethylenes
- Good heat sealability
- Good draw-down
- Excellent oil and grease resistance
- Insensitivity to moisture

Applications:

- Flexible packaging laminates
- Cost effective sealant or tie resin for foil-based structures

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                        | 0.924 g/cm <sup>3</sup> | 0.924 g/cm <sup>3</sup><br>ASTM D792<br>ISO 1183 |
|                         | Melt Index (2.16 kg @190°C)    | 11 g/10min              | 11 g/10min<br>ASTM D1238<br>ISO 1133             |
|                         | Comonomer Content <sup>1</sup> | 3.0 %                   | 3.0 %<br>SK Method                               |
|                         | Vicat Softening Temperature    | 192 °F                  | 88.9 °C<br>ASTM D1525<br>ISO 306/A               |
|                         | Melting Temperature (DSC)      | 219 °F                  | 104 °C<br>SK Method                              |

### Technical Information

|  | Nominal Value (English)   | Nominal Value (SI) | Test Method                        |
|--|---|--------------------|------------------------------------|
| <b>Mechanical Properties</b>           | Tensile Strength at Yield<br>(Compression Molded)   | 1280 psi           | 8.79 Mpa<br>ASTM D638<br>ISO 527-2 |
|  | Tensile Strength at Break<br>(Compression Molded)   | 1780 psi           | 12.3 Mpa<br>ASTM D638<br>ISO 527-2 |
|  | Tensile Elongation at Break<br>(Compression Molded)   | 590 %              | 590 %<br>ASTM D638<br>ISO 527-2    |
| <b>Extrusion</b>                       | Melt Temperature  | 500-554 °F         | 260-290 °C<br>-                    |
|  | Minimum Coating Thickness   | 0.40 mil           | 10 µm<br>SK Method                 |
|  | Minimum Coating Weight  | 6.0 lb/ream        | 9.8 g/m <sup>2</sup><br>SK Method  |
|  | Neck-in<br>(550°F (288°C), 1.0 mil (25.4 µm))   | 2.5 in             | 63.5 mm<br>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.

For additional sales, order and technical assistance

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