

PRIMACOR™ 3440

Copolymer

Introduction

PRIMACOR™ 3440 Copolymer is an ethylene acrylic acid copolymer suitable for extrusion coating and extrusion lamination applications.

PRIMACOR™ 3440 Copolymer exhibits:

- Excellent adhesion to paper, paperboard, metals and polyethylenes
- · Excellent hot-tack and sealability
- Excellent toughness
- Excellent stress crack resistance
- Insensitivity to moisture
- Designed specifically for high line speeds

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 |
|---------------------|---|------------------------------|--------------------------|-------------------------|
| Resin Properties | Density | 0.938 g/cm ³ | 0.938 g/cm ³ | ASTM D792 ISO 1183 |
| | Melt Index (2.16 kg @190°C) | 10 g/10min | 0min 10 g/10min | |
| | Comonomer Content ¹ | 9.7 % | 9.7 % | SK Method |
| | Vicat Softening Temperature | 178 °F | 81.1 °C | ASTM D1525 ISO 306/A |
| | Melting Temperature (DSC) | 208 °F | 97.8 °C | SK Method |
| Film Properties | Seal Initiation Temperature ² | 185 °F | 85.0 °C | SK Method |
| | Water Vapor Transmission Rate 100°F (38°C), 90% RH | 1.1 g·mil/100in²/atm/24hr | 0.41 g·mm/m²/atm/24hr | DIN 53122/2 |



| | | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--|---|-------------------------|----------------------|------------------------|
| Mechan <mark>ic</mark> al Prope <mark>rti</mark> es | 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 |
| Extrusion | Melt Temperature | 500-554 °F | 260-290 ℃ - | |
| | Minimum Coating Thickness | 0.40 mil | 10 μm | SK Method |
| | Minimum Coating Weight | 6.0 lb/ream | 9.8 g/m ² | SK Method |
| | Neck-in (550°F (288°C), 1.0 mil (25.4 μm)) | 2.6 in | 66.0 mm | SK Method |
| Extrusion Condition ³ | Screw Size: 3.5 in. (89 mm); 30:1 L/D Die Gap: 20 mil (0.508 mm) Die: 30 inch (762 mm) die deckled to 24 inches (609.6 mm) Melt Temperature: 550 °F (288 °C) Output: 250 lb/hr (113.4 kg/hr) Air Gap: 6 in. (152 mm) | | | |

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

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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² 25g/m² coatings at 290°C set temperature.

³ 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.