

PRIMACOR™ 3002 Copolymer

Overview Melt Index: 9.8

wt% Comonomer: 8%

PRIMACOR™ 3002 Copolymer is an ethylene acrylic acid copolymer which has been specifically designed by Dow for use as an adhesive or sealant layer in extrusion coating and extrusion lamination.

PRIMACOR 3002 Copolymer exhibits:

- · Excellent Draw-down and edge stability.
- Excellent organoleptic properties.
- Excellent toughness and strength.
- · Adhesion to paper, paperboards, metals and Polyethylene
- Excellent stess crack and product resistance.
- Excellent hot-tack and sealability
- Insensitivity to moisture.

Note:

PRIMACOR 3002 Copolymer should comply with FDA regulation 177.1310 and most European food contact regulation when used unmodified and processed according to good manufacturing practices for food contact applications. Please contact your nearest office regarding food contact compliance statement. The purchaser remains responsible for determining whether the use complies with all relevant regulations.

Applications:

- Food packaging
- Flexible packaging laminates.
- Liquid packaging laminates.

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---------------------------------|---|-------------------------|-------------------------------------|
| Density | 0.936 g/cm ³ | 0.936 g/cm ³ | ASTM D792 ISO 1183/A |
| Melt Index (190°C/2.16 kg) | 9.8 g/10 min | 9.8 g/10 min | ISO 1133 ASTM D1238 ¹ |
| Comonomer Content | 8.0 % | 8.0 % | Dow Method ² |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Modulus - 2% Secant | 16000 psi | 110 MPa | ASTM D638 ISO 527-2 |
| Tensile Strength | | | ASTM D638 ISO 527-2 |
| Yield | 1020 psi | 7.00 MPa | |
| Break | 2760 psi | 19.0 MPa | |
| Tensile Elongation (Break) | 570 % | 570 % | ASTM D638 ISO 527-2 |
| Films | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Seal Initiation Temperature | 185 °F | 85.0 °C | Dow Method ³ |
| Water Vapor Transmission Rate | | | DIN 53122/2 ⁴ |
| 100°F (38°C), 90% RH | 1.0 g⋅mil/100in²/at m/24 hr | 0.40 g·mm/m² 24 hr | /atm/ |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Durometer Hardness (Shore D) | 53 | 53 | ASTM D2240 ISO 868 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Vicat Softening Temperature | 180 °F | 82.2 °C | ASTM D1525 ISO 306 |
| Melting Temperature (DSC) | 212 °F | 100 °C | Dow Method |
| Extrusion | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Melt Temperature | 500 to 554 °F | 260 to 290 °C | |
| Minimum Coating Weight (554°F (| 290°C)) 3.7 lb/ream | 6.0 g/m² | Dow Method |
| Neck-in (554°F (290°C)) | 1.4 in | 3.6 cm | Dow Method ⁵ |
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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.
- ⁴ Divide by coating weight in g/m2 to obtain actual WVTR.
- ⁵ at 100 m/min, 25 g/m² coatings

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