



AMPLIFY™ GR 209 Functional Polymer

Overview

- High elasticity with good elastic recovery
- Excellent impact strength in blends with polyamide and other engineering resins
- Maleic anhydride modified VLDPE
- Complies with U.S. FDA 21 CFR 175.105
- Consult the regulations for complete details.

AMPLIFY™ GR 209 Functional Polymer is a post reactor maleic anhydride grafted (MAH) polymer. The base polymer is an ethylene-butene copolymer exhibiting high flexibility and elasticity. It can be utilized in monolayer and coextruded films and in blends with other polyolefins to enhance toughness of the structure. This product is useful to improve impact resistance for polyamide or other engineering resins and to enhance interlayer adhesion in co-extruded films.

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--|-------------------------|-------------------------|---|
| Density | 0.902 g/cm ³ | 0.902 g/cm ³ | ASTM D792 ISO 1183 |
| Melt Index (190°C/2.16 kg) | 2.0 g/10 min | 2.0 g/10 min | ASTM D1238 ISO 1133 |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Strength (Break) | 1200 psi | 8.30 MPa | ISO 527-2/508 ASTM D638 ¹ |
| Tensile Elongation (Break) | 730 % | 730 % | ISO 527-2/508 ASTM D638 ¹ |
| Flexural Modulus - 2% Secant | 13100 psi | 90.0 MPa | ASTM D790A ISO 178 |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Durometer Hardness | | | ASTM D2240 ISO 868 |
| Shore A | 96 | 96 | |
| Shore D | 35 | 35 | |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Glass Transition Temperature (DSC) | -56.0 °F | -48.9 °C | Dow Method |
| Vicat Softening Temperature | 151 °F | 66.0 °C | ASTM D1525 ISO 306 |
| Melting Temperature (DSC) | 239 °F | 115 °C | Dow Method |
| Additional Information | Nominal Value (English) | Nominal Value (SI) | Test Method |
| MAH Graft Level | | | Dow Method |
| As measured at the time of production. | High (0.5-1.0 wt%) | High (0.5-1.0 wt%) | |

Molded in accordance with ASTM D4976.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ 20 in/min (510 mm/min)

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Published: 2003-10-10

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