

AMPLIFY™ EA 101

Functional Polymer
The Dow Chemical Company

Message:

AMPLIFY™ EA 101 Functional Polymer is produced via a high-pressure reactor. This ethylene-ethyl acrylate (EEA) copolymer exhibits high flexibility and imparts low temperature toughness to a wide range of engineering resins. This polymer demonstrates excellent blend compatibility with other polyolefins. It can be utilized as a tie layer between polyolefins and a variety of polar substrates, such as metal, polyvinylidene chloride (PVDC), polyolefins, cellulose, polyester, polycarbonate, glass, foil, PVC, PET, and Polystyrene.

High performance packaging applications
Polymer modification
Tie layer to PVDC and Polyolefins
Superior additive concentrate carrier
Low gels with excellent thermal stability
Complies with:
U.S. FDA 21 CFR 175.105
U.S. FDA 21 CFR 177.1320 (with Restrictions)
EU, No 10/2011
Consult the regulations for complete details.

| General Information | | | |
|-------------------------------------------|---------------------|-------------------|----------------------|
| Agency Ratings | FDA 21 CFR 175.105 | | |
| | FDA 21 CFR 177.1320 | | |
| | Europe No 10/2011 | | |
| Forms | Particle | | |
| Processing Method | Blow molding | | |
| | Extrusion coating | | |
| Physical | Nominal Value | Unit | Test Method |
| Specific Gravity | 0.931 | g/cm ³ | ASTM D792, ISO 1183 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 6.0 | g/10 min | ASTM D1238, ISO 1133 |
| Comonomer Content ¹ | 18.5 | % | ASTM D3594 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness | | | ASTM D2240, ISO 868 |
| Shaw A | 86 | | ASTM D2240, ISO 868 |
| Shaw D | 31 | | ASTM D2240, ISO 868 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength | | | ASTM D638, ISO 527-2 |
| Yield | 2.96 | MPa | ASTM D638, ISO 527-2 |
| Fracture | 13.4 | MPa | ASTM D638, ISO 527-2 |
| Tensile Elongation | | | ASTM D638, ISO 527-2 |
| Yield | 10 | % | ASTM D638, ISO 527-2 |
| Fracture | 750 | % | ASTM D638, ISO 527-2 |
| Flexural Modulus - 2% Secant | 55.2 | MPa | ASTM D790B, ISO 178 |

| Impact | Nominal Value | Unit | Test Method |
|----------------------------------------------------------|---------------|-------------------|---------------------|
| Tensile Impact Strength ² | 672 | kJ/m ² | ASTM D1822 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (0.45 MPa, Unannealed) | 31.1 | °C | ASTM D648 |
| Brittleness Temperature | < -76.1 | °C | ASTM D746 |
| Vicat Softening Temperature | 57.2 | °C | ASTM D1525, ISO 306 |
| Melting Temperature (DSC) | 97.8 | °C | Internal method |
| Peak Crystallization Temperature (DSC) | 82.8 | °C | Internal method |
| Additional Information | | | |
| 根据 ASTM D 4976 进行模塑和测试. | | | |
| NOTE | | | |

- The calibration range is 15 - 20% EA; the path length has been standardized; the substrate/film thickness is 15 mil; the press temperature is 160°C
- Type s

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