



AMPLIFY™ EA 101 Functional Polymer

Overview

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.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.931 g/cm ³	0.931 g/cm ³	ASTM D792 ISO 1183
Melt Index (190°C/2.16 kg)	6.0 g/10 min	6.0 g/10 min	ASTM D1238 ISO 1133
Comonomer Content	18.5 %	18.5 %	ASTM D3594 ¹
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638 ISO 527-2
Yield	430 psi	2.96 MPa	
Break	1950 psi	13.4 MPa	
Tensile Elongation			ASTM D638 ISO 527-2
Yield	10 %	10 %	
Break	750 %	750 %	
Flexural Modulus - 2% Secant	8000 psi	55.2 MPa	ASTM D790B ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength	320 ft-lb/in ²	672 kJ/m ²	ASTM D1822 ²
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240 ISO 868
Shore A	86	86	
Shore D	31	31	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	88.0 °F	31.1 °C	ASTM D648
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	135 °F	57.2 °C	ASTM D1525 ISO 306
Melting Temperature (DSC)	208 °F	97.8 °C	Dow Method
Peak Crystallization Temperature (DSC)	181 °F	82.8 °C	Dow Method

Additional Information

Molded and tested 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 Calibration Range is 15 - 20% EA; Pathlength is normalized; Plaque/Film Thickness is 15 mil; Press Temperature is 160°C

² Type S

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