AMPLIFY™ EA 103

Functional Polymer

The Dow Chemical Company

Message:

AMPLIFY™ EA 103 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. It can be utilized as in a hot melt adhesive formulation due to the high thermal stability it offers. It is an excellent base component for a film laminate and has marginal RF welding capability. 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, polyvinylidiene chloride (PVDC), polyolefins, cellulose, polyester, polycarbonate, glass, foil, PVC, PET, and Polystyrene.
High performance packaging applications
High flow concentrate carrier
Adhesive blend component
Tie layer to PVDC and Polyolefins
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 Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.930	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) [1] (190°C/2.16 kg)	21	g/10 min	ASTM D1238, ISO 1133
Comonomer Content [2]	19.5	%	ASTM D3594
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240, ISO 868
Shaw A	82		ASTM D2240, ISO 868
Shaw D	27		ASTM D2240, ISO 868
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength			ASTM D638, ISO 527-2
Yield	2.59	MPa	ASTM D638, ISO 527-2
Fracture	9.65	MPa	ASTM D638, ISO 527-2
Tensile Elongation			ASTM D638, ISO 527-2
Yield	11	%	ASTM D638, ISO 527-2

Fracture	750	%	ASTM D638, ISO 527-2
Flexural Modulus - 2% Secant	42.7	MPa	ASTM D790B, ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Tensile Impact Strength [3]	504	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	-63.9	°C	ASTM D746
Vicat Softening Temperature	48.9	°C	ASTM D1525, ISO 306
Melting Temperature (DSC)	95.0	°C	Internal method
Peak Crystallization Temperature (DSC)	77.8	°C	Internal method
Additional Information			
根据 ASTM D 4976 进行模塑和测试.			
NOTE			
1.	Smaller mold openings for products larger than 10 MI		
2.	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		
3.	Type s		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

WECHAT