



AMPLIFY™ TY 1056H Functional Polymer

Overview

AMPLIFY™ TY 1056H Functional Polymer is a maleic anhydride grafted (MAH) polymer concentrate designed as a blend component for unmodified polyethylene. AMPLIFY TY 1056H Functional Polymer promotes adhesion of polyethylene to polyamide and ethylene vinyl alcohol (EVOH). The functionality of this polymer also promotes adhesion between metal, polyolefins, cellulose, polyester, polycarbonate, glass, and foil.

Main Characteristics:

- Maleic anhydride modified HDPE
- Adhesive concentrate for use in blown or cast film and coating applications

Complies with:

- Europe Commission Regulation (EU) No 10/2011
- U.S. FDA 21 CFR 175.105 (c) (5)

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.954 g/cm ³	0.954 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	12 g/10 min	12 g/10 min	ASTM D1238 ISO 1133
MAH Graft Level ¹	Very High	Very High	Dow Method
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			
Break ²	2320 psi	16.0 MPa	ASTM D638
Break	2320 psi	16.0 MPa	ISO 527-2/51
Tensile Elongation			
Break ²	100 %	100 %	ASTM D638
Break	100 %	100 %	ISO 527-2/51
Flexural Modulus - 2% Secant	114000 psi	786 MPa	ASTM D790A ISO 178
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			
Shore A	97	97	ASTM D2240 ISO 868
Shore D	64	64	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	250 °F	121 °C	ASTM D1525 ISO 306
Melting Temperature (DSC)	261 °F	127 °C	Dow Method

Additional Information

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 Low: <0.25 wt%, Medium 0.25-0.5, High >0.5 wt%, Very High >1.0 wt%

² 2.0 in/min (51 mm/min)

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