

AMPLIFY™ TY 1054H

Functional Polymer

The Dow Chemical Company

Message:

AMPLIFY™ TY 1054H Functional Polymer is a maleic anhydride grafted (MAH) polymer concentrate designed as a blend component for unmodified polyethylene. In tie layers for flexible packaging, AMPLIFY TY 1054H Functional Polymer promotes adhesion of polyethylene to barrier polymers such as polyamide and ethylene vinyl alcohol (EVOH). The functionality of this polymer also promotes adhesion between metal, polyolefins, cellulose, polyester, polycarbonate, glass, and foil.

Typical blending levels in polyethylene let-down resin are 20-25% for EVOH and 10-15% for nylon.

Main Characteristics:

Adhesive concentrate for use in blown, cast, and coating applications

Tie layer for food packaging and pipe coating

Adhesive layer in multi-layer flexible film applications

Polymer compatibilizer

Complies with:

U.S. FDA 21 CFR 175.105

Consult the regulations for complete details.

General Information			
Agency Ratings	FDA 21 CFR 175.105		
Forms	Particle		
Physical	Nominal Value	Unit	Test Method
Density	0.898	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238, ISO 1133
MAH Graft Level ¹	High		Internal method
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240, ISO 868
Shaw A	96		ASTM D2240, ISO 868
Shaw D	35		ASTM D2240, ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	8.27	MPa	ASTM D638, ISO 527-2/51
Tensile Elongation (Break)	730	%	ASTM D638, ISO 527-2/51
Flexural Modulus - 2% Secant	90.3	MPa	ASTM D790A, ISO 178
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-48.9	°C	Internal method
Vicat Softening Temperature	66.1	°C	ASTM D1525, ISO 306
Melting Temperature (DSC)	115	°C	Internal method
Additional Information			
Molded in accordance with ASTM D4976.			
NOTE			
1.	Low: 0.5 wt%, Very High > 1.0 wt%.		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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