



# AMPLIFY™ GR 205 Functional Polymer

## Overview

- Maleic anhydride modified HDPE
- 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 177.1520(c)6
- EU, 2002/72/EC

Consult the regulations for complete details.

AMPLIFY™ GR 205 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 GR 205 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.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density			
--	0.958 g/cm <sup>3</sup>	0.958 g/cm <sup>3</sup>	ASTM D792
--	0.960 g/cm <sup>3</sup>	0.960 g/cm <sup>3</sup>	ISO 1183
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238 ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Break)	2300 psi	15.9 MPa	ISO 527-2/51 ASTM D638 <sup>1</sup>
Tensile Elongation (Break)	300 %	300 %	ISO 527-2/51 ASTM D638 <sup>1</sup>
Flexural Modulus - 2% Secant	134000 psi	924 MPa	ASTM D790A ISO 178
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240 ISO 868
Shore A	98	98	
Shore D	67	67	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	264 °F	129 °C	ASTM D1525 ISO 306
Melting Temperature (DSC)	266 °F	130 °C	Dow Method
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
MAH Graft Level			Dow Method
As measured at the time of production.	Very High (>1.0 wt%)	Very High (>1.0 wt%)	

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.

<sup>1</sup> 2.0 in/min (51 mm/min)

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