

AMPLIFY™ GR 205

The Dow Chemical Company - Functional Polymer

Sunday, November 3, 2019

General Information

Product Description

AMPLIFY™ GR 205 Functional Polymer is a maleic anhydride grafted (MAH) polymer. The base polymer is a high density polyethylene.

Main Characteristics:

- · Maleic anhydride grafted HDPE
- · Polymer compatibilizer
- · Adhesion promoter
- Promotes adhesion between metal, polyolefins, cellulose, polyester, polycarbonate, glass and foil.

Complies with:

- U.S. FDA 21 CFR 177.1520(c)6
- EU, No 10/2011

Consult the regulations for complete details.

General					
Material Status	Commercial: Active				
Availability	Asia Pacific	Latin America	North America		
Additive	Antiblock: No	 Processing Aid: No 	Slip: No		
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 6			
Forms	• Pellets				
Processing Method	Blown Film	Cast Film	Coating		

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density	0.960	g/cm³	ASTM D792		
Melt Mass-Flow Rate (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238		
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ISO 1133		
MAH Graft Level ²	Very High		Internal Method		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Strength ³ (Break)	2300	psi	ASTM D638		
Tensile Stress (Break)	2300	psi	ISO 527-2/51		
Tensile Elongation ³ (Break)	300	%	ASTM D638		
Tensile Strain (Break)	300	%	ISO 527-2/51		
Flexural Modulus - 2% Secant	134000	psi	ASTM D790A		
Flexural Modulus - 2% Secant	134000	psi	ISO 178		
Hardness	Nominal Value	Unit	Test Method		
Durometer Hardness			ASTM D2240		
Shore A	98				
Shore D	67				
Shore Hardness			ISO 868		
Shore A	98				
Shore D	67				
Thermal	Nominal Value	Unit	Test Method		
Vicat Softening Temperature	264	°F	ASTM D1525		



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Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	264 °F	ISO 306
Melting Temperature (DSC)	266 °F	Internal Method

Additional Information

Molded in accordance with ASTM D4976.

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- 2 Low <0.25 wt %, Medium 0.25-0.5 wt %, High >0.5 wt %, Very High >1.0 wt%
- ³ 2.0 in/min