



## Nucrel® AE

DuPont Packaging & Industrial Polymers - Ethylene Methyl Acrylate Acrylic Acid

Thursday, March 20, 2008

### General Information

#### Product Description

Nucrel® AE is a terpolymer of ethylene, methacrylic acid, and acrylate, available for use in conventional extrusion coating, coextrusion coating, and extrusion laminating equipment designed to process polyethylene resins. It can be used as a blend of approximately 20 to 40% Nucrel® AE with 80 to 60% LDPE for enhancement of foil adhesion properties. The level of adhesion improvement depends on processing conditions.

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America • South America
Features	• Adhesion, Good		
Uses	• Coating Applications • Coatings, Foil	• Coatings, Paper • Laminates	• Packaging • Packaging, Food
Agency Ratings	• FDA 21 CFR 177.1330 <sup>1</sup>		
Forms	• Pellets		
Processing Method	• Coextrusion	• Extrusion Coating	

### ASTM and ISO Properties

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	0.922	0.920	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	11 g/10 min	11 g/10 min	ASTM D1238
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Point	174 °F	79.0 °C	ASTM D1525
Melting Point	221 °F	105 °C	DSC

#### Additional Properties

Freezing Point (DSC), ASTM D3418: 85°C

### Processing Information

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	554 to 626 °F	290 to 330 °C

#### Notes

<sup>1</sup> When used unmodified for the manufacture of food contact articles, Nucrel® AE will comply with Food Additive Regulations FDA 21 CFR 177.1330 under the U.S. Food, Drug and Cosmetic Act. Such uses are subject to good manufacturing practices and any other limitations which are part of the statute or regulations. These should be consulted for complete details.

<sup>2</sup> Typical properties: these are not to be construed as specifications.