Bynel® 21E781

Sunday, November 3, 2019

DuPont Packaging & Industrial Polymers - Ethylene Acrylate Copolymer

General Information

Product Description

BYNEL® Series 2100 resins are anhydride modified ethylene acrylate resins. They contain a temperature stable ester which makes them functional in high temperature coextrusions. They are available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polyethylene (PE) resins.

BYNEL 2100 series resins adhere to a wide variety of materials. They are most often used to adhere to PET to EVOH or PA. They also adhere to PE, PP, and ethylene copolymers.

The BYNEL 2100 series resins can be used in a variety of coextrusion coating and laminating applications.

General			
Material Status	• Experimental: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion		
Uses	• Adhesives	• Coating Applications	• Laminates
Agency Ratings	• FDA 21 CFR 175.105		
Forms	• Pellets		
Processing Method	• Coextrusion	• Extrusion	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.929		ASTM D792
Density	0.927	g/cm³	ISO 1183
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
Thermal	**Nominal Value**	**Unit**	**Test Method**
Peak Melting Temperature	207	°F	ASTM D3418
Melting Temperature (DSC)	207	°F	ISO 3146
Freezing Point			
--	196	°F	ASTM D3418
--	196	°F	ISO 3146

Processing Information

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	320	°F
Cylinder Zone 2 Temp.	410	°F
Cylinder Zone 3 Temp.	455	°F
Cylinder Zone 4 Temp.	455	°F
Cylinder Zone 5 Temp.	455	°F
Adapter Temperature	455	°F
Melt Temperature	< 500	°F
Die Temperature	455	°F

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Extrusion Notes

Processing conditions shown are for coextrusion with EVOH.

Processing conditions for coextrusion with nylon:

Zone 1: 160°C

Zone 2: 210°C

Zone 3: 235°C

Zone 4: 260°C

Zone 5: 260°C

Adapter: 260°C

Die: 260°C

Notes

[1] Typical properties: these are not to be construed as specifications.