



Bynel® 50E571

DuPont Packaging & Industrial Polymers - Polypropylene

Tuesday, November 5, 2019

General Information

Product Description

BYNEL® Series 5000 resins are anhydride-modified polypropylene resins. They are available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polypropylene (PP) resins.

BYNEL 5000 series resins adhere to a variety of materials. They are most often used to adhere to PP, EVOH and polyamide. These resins are designed for applications in which EVOH or polyamide is melt coextruded with PP or PP copolymers.

General

Material Status	• Experimental: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion		
Uses	• Adhesives		
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	0.892		ASTM D792
Density	0.890	g/cm ³	ISO 1183
Melt Mass-Flow Rate (190°C/2.16 kg)	3.5	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.5	g/10 min	ISO 1133
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	257	°F	ASTM D1525
Vicat Softening Temperature	257	°F	ISO 306
Peak Melting Temperature	313	°F	ASTM D3418
Melting Temperature (DSC)	313	°F	ISO 3146
Freezing Point			
--	214	°F	ISO 3146
--	214	°F	ASTM D3418

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: 210°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.