Bynel® 41E871

Linear Low Density Polyethylene

DuPont Packaging & Industrial Polymers

Message:

BYNEL® Series 4100 series resins are anhydride-modified, linear low-density polyethylene (LLDPE) resins. All BYNEL Series 4100 series resins are available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polyethylene resins.
BYNEL 41E871 is a grade with a mediium-high level of anhydride modification, and is mainly intended for use as a component in a blend with other polyolefin resins.
Physical properties of BYNEL Series 4100 resins are typical of linear low-density polyethylene resins with similar density and melt index values. Use of these adhesive resins in coextruded PE/barrier structures offers improved thermal resistance over that of ethylene vinyl acetate-based adhesive resins.
Applications
BYNEL 4100 series resins adhere to a variety of materials. They are most often used to adhere to EVOH, polyamide, PE and ethylene copolymers.
Series 4100 resins can be used in coextrusion processes including:
blown film
cast film/sheet
blow molding
melt and solid phase thermoforming
sheet and tubing
LLDPE resins are known for their temperature resistance, clarity and toughness, which make the 4100 series resins work well in applications such as:
boil-in-bag structures
blow molded containers in which drop strength is important
bag-in-box films
film where LLDPE is the heat seal layer.

General Information	
Features	Good adhesion
Uses	Films
	Blow molding applications
	Pipe fittings
	Mixing
	cast film
	Sheet
	Adhesive
Agency Ratings	FDA 21 CFR 175.105
Forms	Particle
Processing Method	Solid Phase Press. Form. Thermoforming
	Blow film
	Blow molding
	Co-extrusion molding
	cast film
	Sheet extrusion molding
	Thermoforming

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.920	g/cm³	ASTM D792, ISO 1183

Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.8	g/10 min	ASTM D1238, ISO 1133
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature	100	°C	ASTM D1525, ISO 306
Peak Melting Temperature	121	°C	ASTM D3418, ISO 3146
Freezing Point	106	°C	ASTM D3418
Extrusion	**Nominal Value**	**Unit**	
Cylinder Zone 1 Temp.	160	°C	
Cylinder Zone 2 Temp.	185	°C	
Cylinder Zone 3 Temp.	235	°C	
Cylinder Zone 4 Temp.	235	°C	
Cylinder Zone 5 Temp.	235	°C	
Adapter Temperature	235	°C	
Melt Temperature	< 260	°C	
Die Temperature	235	°C	

Extrusion instructions

Processing conditions shown are for coextrusion with EVOH.Processing conditions for coextrusion with nylon:Zone 1: 160°CZone 2: 185°CZone 3: 235°CZone 4: 260°CZone 5: 260°CAdapter: 260°CDie: 260°C

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China