

## DuPont Bynel® 4003 Anhydride-Modified HDPE Adhesive Resin (discontinued \*\*)

Category : Polymer , Thermoplastic , Polyethylene (PE) , Anhydride-Modified Polyethylene , HDPE

### Material Notes:

Bynel® Series 4000 resins are anhydride-modified, high-density polyethylene resins. They are available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polyethylene (PE) resins. Applications: Bynel® Series 4000 resins are excellent moisture barriers and have a good hydrocarbon resistance. This unique combination of properties makes them useful in a variety of coextrusion applications. HDPE/EVOH tubing and HDPE/polyamide bottles for agricultural chemicals are two examples. Bynel® Series 4000 resins adhere to a variety of materials. They are most often used in coextrusion with EVA, EVOH, polyamide, and PE. Bynel® 4003 is suitable for blown film with polyamide. Bynel® 4006 is appropriate for coextrusion blow molding with either polyamide or EVOH. Bynel® 40E529 can be used for extrusion coating onto paper or bonding to metal surfaces. It provides strong bonds to nylon and good bonds to EVOH in blown film, cast film, and pipe extrusion processes. Physical properties of Bynel® Series 4000 resins are typical of high-density polyethylene resins with similar density and melt index values. The rheology characteristics of each grade are different, so one may be better suited than the others to a particular extrusion process. Information provided by DuPont Packaging Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Bynel-4003-Anhydride-Modified-HDPE-Adhesive-Resin-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_DuPont-Bynel-4003-Anhydride-Modified-HDPE-Adhesive-Resin-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Density	0.951 g/cc	0.0344 lb/in <sup>3</sup>	ASTM D792
Moisture Vapor Transmission	5.40 cc-mm/m <sup>2</sup> -24hr-atm	13.7 cc-mil/100 in <sup>2</sup> -24hr-atm	ASTM E96
Viscosity	2.00e+6 cP @Shear Rate 50.0 1/s, Temperature 190 °C	2.00e+6 cP @Shear Rate 50.0 1/s, Temperature 374 °F	estimated from log-log graph
Melt Flow	1.3 g/10 min @Load 2.16 kg, Temperature 190 °C	1.3 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Thermal Properties	Metric	English	Comments
Melting Point	115 °C	239 °F	Freezing point via DSC/ASTM D3418
	136 °C	277 °F	Melting point via DSC/ASTM D3418
Vicat Softening Point	129 °C	264 °F	ASTM D1525

Processing Properties	Metric	English	Comments
Processing Temperature	235 °C	455 °F	Extruder forward zone and adapter for film or coating with EVA or EVOH
Nozzle Temperature	235 °C	455 °F	Die

Processing Properties

Metric

English

Comments

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China