

## LyondellBasell Petrothene® NA963083 Low Density Polyethylene

Category : Polymer , Film , Thermoplastic , Polyethylene (PE) , LDPE , Low Density Polyethylene (LDPE), Film Grade

### Material Notes:

**Applications**PETROTHENE NA 963 is a series of resins formulated with special antiblock additive and designed for a wide variety of industrial film applications where high impact strength and excellent drawdown are needed. NA 963 exhibits uniformity, ease of processing and good tensile strength. **Regulatory Status**The basic resin NA 963 meets the requirements of the Food and Drug Administration regulation, 21 CFR 177.1520. This regulation allows the use of this olefin polymer in "articles or components of articles intended for use in contact with food." Specific limitations or conditions of use may apply. Contact your Equistar sales representative for more information. **Processing Techniques**Generally recommended extrusion conditions include a melt temperature range of 310°-350°F; a blow-up ratio range of 1.8-2.5:1. Drawdown to 1.0 mils is possible at commercial rates when proper extrusion techniques are used. Specific recommendations for processing NA 963 can be made only when the end use applications, required properties and processing equipment are known. For exact recommendations, contact your Equistar sales representative. **Physical Properties**These are typical values and not to be construed as specific product limits. Data obtained from film produced in a 3.5" (98 mm) blown film line, commercially available 8" (203 mm) die, 350°F (177°C) melt extrusion temperature, 2:1 BUR, 1.25 mil (32 micron) gauge, 0.025" die gap at 150 lb/hr. This product is from the former Equistar product line.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LyondellBasell-Petrothene-NA963083-Low-Density-Polyethylene.php](http://www.lookpolymers.com/polymer_LyondellBasell-Petrothene-NA963083-Low-Density-Polyethylene.php)

Physical Properties	Metric	English	Comments
Density	0.919 g/cc	0.0332 lb/in <sup>3</sup>	ASTM D1505
Thickness	31.8 microns	1.25 mil	2:1 BUR; 25 mil die gap
Melt Flow	0.70 g/10 min	0.70 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	46	46	Molded; ASTM D2240
Tensile Strength at Break	11.4 MPa	1650 psi	Molded; ASTM D638
Tensile Strength, Yield	10.7 MPa	1550 psi	Molded; ASTM D638
Film Elongation at Break, MD	160 %	160 %	ASTM D882
Film Elongation at Break, TD	480 %	480 %	ASTM D882
Elongation at Break	700 %	700 %	Molded; ASTM D638
Elongation at Yield	100 %	100 %	Molded; ASTM D638
Elmendorf Tear Strength MD	300 g	300 g	ASTM D1922
Elmendorf Tear Strength TD	180 g	180 g	ASTM D1922
Dart Drop Test			F <sub>50</sub> ; ASTM D1709

Mechanical Properties	<sup>130 g</sup> Metric	<sup>0.287 lb</sup> English	Comments
Film Tensile Strength at Break, MD	23.4 MPa	3400 psi	ASTM D882
Film Tensile Strength at Break, TD	16.5 MPa	2400 psi	ASTM D882
1% Secant Modulus, MD	179 MPa	26000 psi	ASTM D882
1% Secant Modulus, TD	221 MPa	32000 psi	ASTM D882

Thermal Properties	Metric	English	Comments
Vicat Softening Point	90.0 Â°C	194 Â°F	ASTM D1525
Brittleness Temperature	-75.0 Â°C	-103 Â°F	Molded; F<sub>50</sub>; ASTM D746

Processing Properties	Metric	English	Comments
Melt Temperature	177 Â°C	350 Â°F	

## 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