

## LyondellBasell Petrothene® NA942094 Low Density Polyethylene

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

### Material Notes:

**Applications**PETROTHENE NA 942 is a series of resins designed especially for heavy duty film applications, such as bags used to package fertilizer, peat moss, decorative stone, and agricultural and construction materials. NA 942 exhibits excellent impact properties and puncture resistance. **Regulatory Status**NA 942 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 330°-430°F; a blow-up ratio range of 1.8-2.5:1. Drawdown to 2.0 mils is possible at commercial rates when proper extrusion techniques are used. Specific recommendations for processing NA 942 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"(89mm) blown film line, commercially available 8"(203 mm)die, 375°F(191°C) melt extrusion temperature, 2:1 BUR, 1.25 mil (32 micron) gauge, 0.025"die gap at 130 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-NA942094-Low-Density-Polyethylene.php](http://www.lookpolymers.com/polymer_LyondellBasell-Petrothene-NA942094-Low-Density-Polyethylene.php)

Physical Properties	Metric	English	Comments
Density	0.918 g/cc	0.0332 lb/in <sup>3</sup>	ASTM D1505
Environmental Stress Crack Resistance	>= 168 hour	>= 168 hour	Cond. A 100% Igepal, 0 failures in 7 days; ASTM D1693
Thickness	50.8 microns	2.00 mil	2:1 BUR; 25 mil die gap
Melt Flow	0.18 g/10 min	0.18 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	42	42	Molded; ASTM D2240
Tensile Strength at Break	17.9 MPa	2600 psi	Molded; ASTM D638
Tensile Strength, Yield	9.65 MPa	1400 psi	Molded; ASTM D638
Film Elongation at Break, MD	300 %	300 %	ASTM D882
Film Elongation at Break, TD	450 %	450 %	ASTM D882
Elongation at Break	750 %	750 %	Molded; ASTM D638
Elongation at Yield	100 %	100 %	Molded; ASTM D638
Dart Drop Test	220 g	0.485 lb	F <sub>50</sub> ; ASTM D1709

Film Tensile Strength at Break, MD Mechanical Properties	20.7 MPa Metric	3000 psi English	ASTM D882 Comments
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Thermal Properties	Metric	English	Comments
Brittleness Temperature	-75.0 Â°C	-103 Â°F	Molded; F<sub>50</sub>; ASTM D746

Processing Properties	Metric	English	Comments
Melt Temperature	221 Â°C	430 Â°F	

## Contact Songhan Plastic Technology Co.,Ltd.

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