



Petrothene®

# NA980

Low Density Polyethylene  
Film Extrusion Grade

Melt Index 0.25 Density 0.920

## Applications

PETROTHENE NA980 is designed specifically for the shrink packaging industry and has a balance of properties over a wide range of blow-up ratios. NA980 is also recommended for bundling, pallet wrap and heavy-duty liner where clarity is important. Excellent bubble stability, melt strength, impact and shrinkage make NA980 an outstanding polymer for all these demanding applications.

## Regulatory Status

NA980 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 further information regarding the suitability of specific products for specific applications.

## Processing Techniques

Optimum properties are obtained at melt temperatures between 330°-430°F (165°-221°C) and a blow-up ratio between 1.7-3.0:1, using proper techniques and equipment. Specific recommendations for processing NA980 can be made only when the end use applications, required properties and processing equipment are known. For exact recommendations, contact your Equistar sales representative.

## Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	0.25	g/10 min	D 1238
Density	0.920	g/cc	D 1505
Vicat Softening Point	93	°C	D 1525
<b>Film*</b>			
Dart Drop Impact Strength, F <sub>50</sub>	180	9	D 1709
Tensile Strength, MD (TD)	3,000 (2,750)	psi	D 882
Elongation, MD (TD)	310 (430)	%	D 882
1% Secant Modulus, MD (TD)	30,000 (35,000)	psi	E 111
<b>Molding</b>			
Low Temperature Brittleness, F <sub>50</sub>	-75	°C	D 746
Tensile Strength @ Yield	1,420	psi	D 638
Tensile Strength @ Break	2,600	psi	
Elongation @ Yield	100	%	D 638
Elongation @ Break	700	%	
Hardness, Shore D	45		D 2240

### Product NA980000

Slip	None
Antiblock	None

These are typical values and not to be construed as specific product limits.

\* Data obtained from film produced in a 3½" (89 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.

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