Technical Data Sheet

Petrothene NA942094

Low Density Polyethylene

Product Description

Petrothene NA942094 is selected by customers for heavy duty film applications, such as bags used to package fertilizer, peat moss, decorative stone and agricultural and construction materials. NA942094 exhibits excellent impact properties and puncture resistance. NA942094 offers improved bubble stability compared to traditional fractional melt flow LDPE grades.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA942094 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Agriculture Film; Bags & Pouches; Can Liners; Film Wrap; Food Packaging Film; Heavy Duty Packaging; Liner Film; Shrink Film; Specialty Film; Textile Packaging Film
Market	Flexible Packaging
Processing Method	Blown Film

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.18	g/10 min	0.18	g/10 min	ASTM D1238
Base Resin Density, (23 °C)	0.918	g/cm³	0.918	g/cm³	ASTM D1505
Product Density, (23 °C)	0.921	g/cm³	0.921	g/cm³	ASTM D1505
Mechanical					
Tensile Strength at Break	2600	psi	17.9	MPa	ASTM D638
Tensile Strength at Yield	1400	psi	9.65	MPa	ASTM D638
Tensile Elongation at Break	750	%	750	%	ASTM D638
Tensile Elongation at Yield	100	%	100	%	ASTM D638
Film					
Dart Drop Impact Strength, F50	220	g	220	g	ASTM D1709
Tensile Strength at Break, MD	3000	psi	20.7	MPa	ASTM D882
Tensile Elongation at Break					
MD	300	%	300	%	ASTM D882
TD	450	%	450	%	ASTM D882
Hardness					
Shore Hardness, (Shore D)	42		42		ASTM D2240
Thermal					
Low Temperature Brittleness, F_{50}	-103	°F	-75	°C	ASTM D746
Additive					
Slip	550	ppm	550	ppm	LYB Method
Antiblock	4000	ppm	4000	ppm	LYB Method

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

Data obtained from 2.0 mil (51 micron) film produced on a blown film line with a 8" (203 mm) die, 430°F (221°C) melt temperature, 2:1 BUR, 0.025" die gap at 170 lbs/hr.

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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