

Technical Data Sheet



Petrothene NA870252

Low Density Polyethylene

Product Description

Petrothene NA870252 exhibits an excellent balance of toughness and softness with excellent dimensional stability. This resin contains a mold release agent and displays excellent part ejection properties. Typical applications include caps and closures, housewares, toys, containers and novelty items.

Regulatory Status

For regulatory compliance information, see Petrothene NA870252 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Caps & Closures
Market	Rigid Packaging
Processing Method	Injection Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	38	g/10 min	38	g/10 min	ASTM D1238
Density, (23 °C)	0.921	g/cm ³	0.921	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus					
(1% Secant)	33000	psi	230	MPa	ASTM D790
(2% Secant)	27000	psi	190	MPa	ASTM D790
Tensile Strength at Break	1300	psi	9	MPa	ASTM D638
Tensile Strength at Yield	1850	psi	13	MPa	ASTM D638
Tensile Elongation at Yield	13	%	13	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	41		41		ASTM D2240
Thermal					
Vicat Softening Temperature	187	°F	86	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	-13	°F	-25	°C	ASTM D746



Notes

Tensile properties were run with a crosshead speed of 20 inches/min or 500 mm/min.

Flexural Modulus properties were run with a crosshead speed of 0.5 inches/min or 12.5 mm/min.

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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