

Petrothene

NA870252

Low Density Polyethylene

Injection Molding Grade

Melt Index: 38 Density: 0.921



Applications

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

NA870252 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 product safety representative for more information.

Processing Techniques

Specific recommendations for the processing of NA870252 can be made only when the end use application, required properties and the processing equipment are known.

Suggested Start-up Conditions

Extruder Zone	Rear	Center	Front	Nozzle
Cylinder Temperature	325°F	350°F	350°F	350°F

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	38	g/10 min	D1238
Density	0.921	g/cc	D1505
Tensile Strength @ Break ¹	1,300 (9)	psi (MPa)	D638
Tensile Strength @ Yield ¹	1,850 (13)	psi (MPa)	D638
Elongation @ Yield ¹	13	%	D638
1% Secant Modulus ²	33,000 (230)	psi (MPa)	D790
2% Secant Modulus ²	27,000 (190)	psi (MPa)	D790
Vicat Softening Point	187 (86)	°F (°C)	D1525
Hardness, Shore D	41		D2280
Low Temperature Brittleness, F ₅₀ ³	-13 (-25)	°F (°C)	D746

¹ Crosshead Speed – 20 in/min

² Crosshead Speed - ½ in/min

³ Test method has been found useful for specification purposes, but does not necessarily indicate the lowest temperature at which the material may be used.

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