Petrothene NA860

Low Density Polyethylene

Injection Molding Grade

Flow Index 24 Density 0.921

Applications

PETROTHENE NA 860 is a series of medium flow, low density polyethylene resins for the injection molding of caps, closures and other specialty applications. These resins exhibit an excellent balance of toughness, softness, dimensional stability and processability.

Regulatory Status

The base resin NA 860 meets the requirements of the Food and Drug Administration, 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. For more information, contact your Equistar sales representative.

Processing Techniques

Specific recommendations for processing NA 860 can only be made when the processing conditions, equipment and end use are known. For further suggestions, contact your Equistar sales representative.

Physical Properties

Property	Value	Units	ASTM Test Method
Melt Index	24	g/10 min	D 1238
Density	0.921	g/cc	D 1505
Tensile Strength @ Break[1]	1,230 (9)	psi (MPa)	D 638
Tensile Strength @ Yield[1]	1,770 (12)	psi (MPa)	D 638
Elongation @ Yield[1]	14	%	D 638
1% Secant Modulus[2]	32,000 (220)	psi (MPa)	D 790
2% Secant Modulus[2]	26,000 (180)	psi (MPa)	D 790
Vicat Softening Point	198 (92)	°F (°C)	D 1525
Hardness, Shore D	44		D 2280
Low Temperature Brittleness, F_{50}[3]	-31 (-35)	°F (°C)	D 746

Product	NA 860-008	NA 860-241
Slip	None	High
Antioxidant	Low	Low

[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.