

Technical Data Sheet

Petrothene NA345009



Low Density Polyethylene

Product Description

Petrothene NA345009 is a low density homopolymer resin selected by customers for blow molding and injection molding applications. Clarity combined with strength and high stiffness are key attributes of NA345009. Typical customer applications include flexible containers, squeeze bottles and toys.

Application Bottles For Consumer Goods; Caps & Closures; Clarity Film; Soft Profile & Sheets
Market Rigid Packaging
Processing Method Extrusion Blow Molding; Injection Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	1.8	g/10 min	1.8	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)	43000	psi	300	MPa	ASTM D790
(2% Secant)	36000	psi	250	MPa	ASTM D790
Tensile Strength at Break	1750	psi	12	MPa	ASTM D638
Tensile Strength at Yield	1800	psi	12	MPa	ASTM D638
Tensile Elongation at Break	>600	%	>600	%	ASTM D638
Tensile Elongation at Yield	14	%	14	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	56		56		ASTM D2240
Thermal					
Vicat Softening Temperature	205	°F	96	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	115	°F	46	°C	ASTM D648