

Technical Data Sheet

Petrothene NA442051



Ethylene Vinyl Acetate

Product Description

Petrothene NA442051 is a LDPE/EVA copolymer resin selected by customers for high impact/high clarity packaging and lamination applications.

Application	Bags & Pouches; Clarity Film; Film Wrap; Food Packaging Film; Lamination Film; Sealants; Secondary Packaging; Specialty Film
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	1.5	g/10 min	1.5	g/10 min	ASTM D1238
Vinyl Acetate Content	5.0	%	5.0	%	LYB Method
Film					
Dart Drop Impact Strength, F50	140	g	140	g	ASTM D1709
Tensile Strength at Break					
MD	3600	psi	24.8	MPa	ASTM D882
TD	2800	psi	19.3	MPa	ASTM D882
Tensile Elongation at Break					
MD	320	%	320	%	ASTM D882
TD	550	%	550	%	ASTM D882
1% Secant Modulus					
MD	19000	psi	131	MPa	ASTM D882
TD	24000	psi	165	MPa	ASTM D882
Elmendorf Tear Strength					
MD	160	g	160	g	ASTM D1922
TD	180	g	180	g	ASTM D1922
Thermal					
Vicat Softening Temperature	190	°F	88	°C	ASTM D1525
Optical					
Haze	4	%	4	%	ASTM D1003
Gloss, (45°)	75		75		ASTM D2457
Additive					
Slip	500	ppm	500	ppm	LYB Method
Antiblock	1000	ppm	1000	ppm	LYB Method
Processing Parameters					
Melt Temperature	330 - 380	°F	166 - 194	°C	
Blow-Up Ratio	1.7 - 3.0	BUR	1.7 - 3.0	BUR	