

Technical Data Sheet

Petrothene GA578189

Linear Low Density Polyethylene



Product Description

Petrothene GA578189 is a pelletized LLDPE resin for injection molding applications such as lids, caps and closures, containers and other items needing rigidity and good appearance. GA578189 can be used in operations requiring fast cycle times, as well.

Application	Caps & Closures; Containers; Housewares; Lids; Outdoor and Power Tools
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)	85	g/10 min	85	g/10 min	ASTM D1238
Density, (23 °C)	0.928	g/cm ³	0.928	g/cm ³	ASTM D1505
Spiral Flow	22.0	in	56.0	cm	LYB Method
Mechanical					
Flexural Modulus					
(1% Secant)	80000	psi	560	MPa	ASTM D790
(2% Secant)	70000	psi	480	MPa	ASTM D790
Tensile Strength at Break, (23 °C)	1800	psi	13	MPa	ASTM D638
Tensile Strength at Yield, (23 °C)	2400	psi	17	MPa	ASTM D638
Tensile Elongation at Yield, (23 °C)	10	%	10	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	54		54		ASTM D2240
Thermal					
Vicat Softening Temperature	185	°F	85	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	-75	°F	-60	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	121	°F	50	°C	ASTM D648

