

## Technical Data Sheet

### *Petrothene* GA694189



Linear Low Density Polyethylene

#### Product Description

*Petrothene* GA694189 is a pelletized LLDPE copolymer resin selected by customers for injection molding. Typical applications include lids and thin-walled items that require high flow and short cycle times. GA694189 exhibits excellent flow, warp resistance and surface appearance.

#### Regulatory Status

For regulatory compliance information, see *Petrothene* GA694189 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Lids
Market	Rigid Packaging
Processing Method	Injection Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
Melt Flow Rate, (190 °C/2.16 kg)	160	g/10 min	160	g/10 min	ASTM D1238
Density, (23 °C)	0.933	g/cm <sup>3</sup>	0.933	g/cm <sup>3</sup>	ASTM D1505
Spiral Flow	29.0	in	73.0	cm	LYB Method
<b>Mechanical</b>					
Flexural Modulus					
(1% Secant)	94000	psi	650	MPa	ASTM D790
(2% Secant)	83000	psi	570	MPa	ASTM D790
Tensile Strength at Break, (23 °C)	2300	psi	16	MPa	ASTM D638
Tensile Strength at Yield, (23 °C)	2500	psi	17	MPa	ASTM D638
Tensile Elongation at Yield, (23 °C)	10	%	10	%	ASTM D638
<b>Hardness</b>					
Shore Hardness, (Shore D)	62		62		ASTM D2240
<b>Thermal</b>					
Vicat Softening Temperature	198	°F	92	°C	ASTM D1525
Low Temperature Brittleness, F <sub>50</sub>	19	°F	-7	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	127	°F	53	°C	ASTM D648

#### Notes

Tensile properties were run with a crosshead speed of 2 inches/min or 50 mm/min.

Flexural Modulus properties were run with a crosshead speed of 0.5 inches/min or 12.5 mm/min.

Spiral Flow measures the number of inches of flow produced when molten resin is injected into a long, spiral channel (0.0625" insert), at a constant injection pressure of 1000 psi with a melt temperature of 440 °F.

Deflection Temperature Under Load and Low Temperature Brittleness data are for control and development work and are not intended for use in design or predicting performance at elevated or sub-ambient temperatures.

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