Technical Data Sheet

Petrothene GA564189

Linear Low Density Polyethylene

Product Description

Petrothene GA564189 exhibits good stiffness and low temperature toughness. Typical applications include trash cans, industrial containers, housewares, toys, closures and compounding.

Regulatory Status

For regulatory compliance information, see *Petrothene* GA564189 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Housewares; Outdoor and Power Tools; Sports, Leisure & Toys; Trash Cans; Wire & Cable
Market	Compounding; Consumer Products; Rigid Packaging; Wire & Cable
Processing Method	Compounding; Injection Molding; Wire & Cable

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	20	g/10 min	20	g/10 min	ASTM D1238
Density, (23 °C)	0.924	g/cm³	0.924	g/cm³	ASTM D1505
Spiral Flow	12.6	in	32.1	cm	LYB Method
Mechanical					
Flexural Modulus					
(1% Secant)	63000	psi	440	MPa	ASTM D790
(2% Secant)	55000	psi	380	MPa	ASTM D790
Tensile Strength at Break, (23 °C)	1200	psi	8	MPa	ASTM D638
Tensile Strength at Yield, (23 °C)	2100	psi	14	MPa	ASTM D638
Tensile Elongation at Yield, (23 °C)	12	%	12	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	57		57		ASTM D2240
Thermal					
Vicat Softening Temperature	196	°F	91	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	113	°F	45	°C	ASTM D648

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

Tensile properties were run with a crosshead speed of 20 inches/min or 500 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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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