Technical Data Sheet

Petrothene GA584189

Linear Low Density Polyethylene

Product Description

Petrothene GA584189 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. GA584189 exhibits excellent flow, warp resistance and surface appearance.

Regulatory Status

For regulatory compliance information, see *Petrothene* GA584189 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
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	105	g/10 min	105	g/10 min	ASTM D1238
Density, (23 °C)	0.929	g/cm³	0.929	g/cm³	ASTM D1505
Spiral Flow	24.3	in	61.8	cm	LYB Method
Mechanical					
Flexural Modulus					
(1% Secant)	80000	psi	550	MPa	ASTM D790
(2% Secant)	69000	psi	480	MPa	ASTM D790
Tensile Strength at Break, (23 °C)	1700	psi	12	MPa	ASTM D638
Tensile Strength at Yield, (23 °C)	2200	psi	15	MPa	ASTM D638
Tensile Elongation at Yield, (23 °C)	11	%	11	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	60		60		ASTM D2240
Thermal					
Vicat Softening Temperature	182	°F	83	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	-22	°F	-30	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	124	°F	51	°C	ASTM D648

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

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.

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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