Technical Data Sheet

Petrothene NA831000

Low Density Polyethylene

Product Description

Petrothene NA831000 resin exhibits high stress crack resistance and low temperature brittleness. Typical applications include housewares, containers and industrial parts.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA831000 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Bottles and Vials; Bottles For Consumer Goods; Bottles for Industrial Use; Clear Containers; Opaque Containers
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)	9.0	g/10 min	9.0	g/10 min	ASTM D1238
Density, (23 °C)	0.919	g/cm³	0.919	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	37000	psi	255	MPa	ASTM D790
Tensile Strength at Break	1230	psi	9	MPa	ASTM D638
Tensile Strength at Yield	1300	psi	9	MPa	ASTM D638
Tensile Elongation at Yield	14	%	14	%	ASTM D638
Hardness					
Shore Hardness, (Shore D)	48		48		ASTM D2240
Thermal					
Vicat Softening Temperature	184	°F	85	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	-85	°F	-65	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	104	°F	40	°C	ASTM D648

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

Notes

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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