Technical Data Sheet

Petrothene LR732031

High Density Polyethylene

Product Description

Petrothene LR732031 is a high density polyethylene resin that exhibits an excellent balance of stiffness and environmental stress crack resistance. This resin has excellent extrusion characteristics and melt strength.

Regulatory Status

For regulatory compliance information, see *Petrothene* LR732031 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	General Sheet Extrusion
Market	Rigid Packaging
Processing Method	Sheet and Profile Extrusion

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.30	g/10 min	0.30	g/10 min	ASTM D1238
Density, (23 °C)	0.953	g/cm³	0.953	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	181000	psi	1250	MPa	ASTM D790
Tensile Strength at Yield	4000	psi	27.6	MPa	ASTM D638
Tensile Elongation at Break	>500	%	>500	%	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	30	hr	30	hr	ASTM D1693
Impact					
Tensile Impact Strength	128	ft-lb/in²	269	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	67		67		ASTM D2240
Thermal					
Vicat Softening Temperature	259	°F	126	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	167	°F	75	°C	ASTM D648

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

Notes

Igepal® is a registered trademark of Rhodia.

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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