Technical Data Sheet

Petrothene GA818073

Linear Low Density Polyethylene

Product Description

Petrothene GA818073 offers the high environmental stress crack resistance characteristics of linear low density polyethylene with the processing properties needed for blowmolding and extrusion applications. The broad molecular weight distribution of GA818073 combines good melt strength with a significantly reduced tendency to melt fracture, two drawbacks common to conventional fractional melt index LLDPE resins. This resin is selected by customers for use in squeeze tubes and bottles for pharmaceutical and personal care product packaging and drum liners.

Regulatory Status

For regulatory compliance information, see *Petrothene* GA818073 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Good ESCR (Environmental Stress Cracking Resistance)

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.75	g/10 min	0.75	g/10 min	ASTM D1238
Density, (23 °C)	0.9205	g/cm³	0.9205	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	40000	psi	276	MPa	ASTM D790
Tensile Strength at Break	2170	psi	15.0	MPa	ASTM D638
Tensile Elongation at Break	>700	%	>700	%	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
Hardness					
Shore Hardness, (Shore D)	51		51		ASTM D2240
Thermal					
Vicat Softening Temperature	190	°F	88	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-44	°F	<-42	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	118	°F	48	°C	ASTM D648

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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