

Petrothene® GA574000

Linear Low Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

PETROTHENE GA 574-000 exhibits excellent flow and impact with good stiffness. Typical applications include lids, closures, containers, housewares and medical items.

Without exception, all potential activities for applications in the pharmaceutical, medical device, laboratory and diagnostics area have to be discussed with the relevant Technical (P & AD) and Business contacts first.

General

Features	• Food Contact Acceptable • Good Flow	• Good Impact Resistance • Good Stiffness	
Uses	• Closures • Containers	• Household Goods • Lids	• Medical/Healthcare Applications
Agency Ratings	• FDA 21 CFR 177.1520		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.926 g/cm ³	0.926 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	50 g/10 min	50 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield ³	2100 psi	14.5 MPa	
Break	1500 psi	10.3 MPa	
Tensile Elongation ³ (Yield)	8.2 %	8.2 %	ASTM D638
Flexural Modulus ⁴			ASTM D790
1% Secant	64000 psi	441 MPa	
2% Secant	60000 psi	414 MPa	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	52	52	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	122 °F	50.0 °C	
Brittleness Temperature	-105 °F	-76.0 °C	ASTM D746
Vicat Softening Temperature	205 °F	96.0 °C	ASTM D1525

Additional Information

Spiral Flow, Equistar Test Method, 0.625 in insert, 1000 psi injection pressure, 440°F melt temperature: 19.3 in

Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	350 °F	177 °C
Middle Temperature	375 °F	191 °C
Front Temperature	400 °F	204 °C
Nozzle Temperature	400 °F	204 °C