

Technical Data Sheet

Petrothene LT570401

High Density Polyethylene

Product Description

Petrothene LT570401 resin exhibits good stiffness and environmental stress crack resistance. Typical applications include large containers, seating and durable goods.

Regulatory Status

For regulatory compliance information, see *Petrothene* LT570401 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial
Availability	North America
Application	Industrial Packaging; Structural Parts
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Good ESCR (Environmental Stress Cracking Resistance); Good Processability; Good Stiffness

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/21.6 kg)	21	g/10 min	21	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm ³	0.949	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	145000	psi	1000	MPa	ASTM D790
Tensile Strength at Yield	3800	psi	26.2	MPa	ASTM D638
Tensile Elongation at Break	>600	%	>600	%	ASTM D638
Environmental Stress Crack Resistance, F ₅₀	200	hr	200	hr	ASTM D1693
Impact					
Tensile Impact Strength	124	ft-lb/in ²	260	kJ/m ²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	67		67		ASTM D2240
Thermal					
Vicat Softening Point	259	°F	126	°C	ASTM D1525
Low Temperature Brittleness, F ₅₀	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	165	°F	74	°C	ASTM D648

Notes

ESCR performed using 100% Igepal® CO-630, 50°C, where; Igepal® is a registered trademark of Rhodia.

These are typical property values not to be construed as specification limits.