Technical Data Sheet

Petrothene LP500210

High Density Polyethylene

Product Description

The *Petrothene* LP5002 series of polyethylene resins exhibits excellent environmental stress crack resistance and is selected by customers for use in bottles which contain aggressive agricultural and household chemicals. This product contains synthetic antistat.

Application	Bottles For Consumer Goods; Bottles for Industrial Use
Market	Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Contains Antistat; High 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)	0.20	g/10 min	0.20	g/10 min	ASTM D1238
Density, (23 °C)	0.946	g/cm³	0.946	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (1% Secant)	140000	psi	965	MPa	ASTM D790
Tensile Strength at Yield	3400	psi	23.4	MPa	ASTM D638
Tensile Elongation at Break	>800	%	>800	%	ASTM D638
Environmental Stress Crack Resistance, F_{50} (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
Impact					
Tensile Impact Strength	245	ft-lb/in²	515	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	65		65		ASTM D2240
Thermal					
Vicat Softening Temperature	252	°F	122	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	151	°F	66	°C	ASTM D648
Additive					
Antistat	High		High		LYB Method

Product	Antistat(ppm)
LP500200	None
LP500210	High