Technical Data Sheet

Alathon L4930TC

High Density Polyethylene

Product Description

Alathon L4930TC is a bimodal high density polyethylene copolymer natural resin used by customers for telecommunications and electrical conduits. L4930TC offers an excellent balance of stiffness, toughness and ease of processing. Conduits made with this resin are used with fiber optic cable, electrical cable and telecommunications cable. L4930TC meets the material requirements for polyethylene conduit as per ASTM F2160 and also meets the requirements of ASTM D3350 cell classifications PE435540A and PE435580A.

Application	Conduit
Market	Industrial, Building & Construction; Pipe
Processing Method	Pipe

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
(190 °C/5.0 kg)	1.1	g/10 min	1.1	g/10 min	ASTM D1238
(190 °C/21.6 kg)	26	g/10 min	26	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm³	0.949	g/cm³	ASTM D1505
Mechanical					
Flexural Modulus, (2% Secant)	136000	psi	938	MPa	ASTM D790
Tensile Strength at Yield	3600	psi	24.8	MPa	ASTM D638
Tensile Elongation at Break	>600	%	>600	%	ASTM D638
Environmental Stress Crack Resistance					
F_{10} (10% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
F_{20} (100% Igepal®, Cond C)	>600	hr	>600	hr	ASTM D1693
F_{50} (10% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
F_{50} (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
Impact					
Tensile Impact Strength	277	ft-lb/in²	582	kJ/m²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	63		63		ASTM D2240
Thermal					
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746