

Technical Data Sheet

Alathon 9307TC



High Density Polyethylene

Product Description

Alathon 9307TC is a bimodal, high molecular weight, high density polyethylene resin with excellent processing characteristics. 9307TC is selected by customers for demanding conduit and corrugated pipe applications.

- ASTM D3350 Cell Classification: **PE445560**

Application	Conduit; Corrugated Pipe
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)	0.07	g/10 min	0.07	g/10 min	ASTM D1238
(190 °C/21.6 kg)	16	g/10 min	16	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm ³	0.949	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (2% Secant)	141000	psi	972	MPa	ASTM D790
Tensile Stress at Break	4970	psi	34.3	MPa	ASTM D638
Tensile Stress at Yield	3560	psi	24.5	MPa	ASTM D638
Tensile Elongation at Break	>600	%	>600	%	ASTM D638
Environmental Stress Crack Resistance					
F ₅₀ (10% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
F ₅₀ (100% Igepal®, Cond B)	>1000	hr	>1000	hr	ASTM D1693
Notched Constant Ligament Stress, (10% Igepal, 50 °C, 600 psi stress)	>4000	hr	>4000	hr	ASTM F2136
PENT, (2.4 MPa, 80 °C, Air)	>100	hr	>100	hr	ASTM F1473
Thermal					
Deflection Temperature Under Load, (66 psi, Unannealed)	154	°F	68	°C	ASTM D648
DSC Induction Temperature	500	°F	260	°C	ASTM D3350
Oxidative-Induction Time, (200 °C)	100	min	100	min	ASTM D3895