

Technical Data Sheet

Alathon L5332CP

High Density Polyethylene

Product Description

Alathon L5332CP is a high density polyethylene resin typically used by customers for corrugated pipe, conduit and profile extrusion applications. This product meets the stress crack resistance requirement of AASHTO M294. It exhibits excellent processing stability. L5332CP conforms to ASTM D3350 cell classifications **PE435520A** and **PE435580A**.

Application	Drainage 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)	0.32	g/10 min	0.32	g/10 min	ASTM D1238
Density, (23 °C)	0.953	g/cm ³	0.953	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (2% Secant)	160000	psi	1100	MPa	ASTM D790
Tensile Strength at Yield	4000	psi	27.6	MPa	ASTM D638
Tensile Elongation at Break	>800	%	>800	%	ASTM D638
Tensile Elongation at Yield	8	%	8	%	ASTM D638
Environmental Stress Crack Resistance					
F ₂₀ (100% Igepal®, Cond B)	>600	hr	>600	hr	ASTM D1693
F ₅₀ (10% Igepal®, Cond B)	100	hr	100	hr	ASTM D1693
Notched Constant Ligament Stress, (10% Igepal, 50 °C, 600 psi stress)	>35	hr	>35	hr	ASTM F2136
Impact					
Tensile Impact Strength	190	ft-lb/in ²	399	kJ/m ²	ASTM D1822
Hardness					
Shore Hardness, (Shore D)	66		66		ASTM D2240
Thermal					
Deflection Temperature Under Load, (66 psi, Unannealed)	156	°F	69	°C	ASTM D648
DSC Induction Temperature	>428	°F	>220	°C	ASTM D3350
Oxidation Induction Time, (200 °C)	>40	min	>40	min	ISO 11357-6