

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**.

Regulatory Status

For regulatory compliance information, see *Alathon L5332CP* [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
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



Notes

Igepal® is a registered trademark of Rhodia.

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2026

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.

