

Technical Data Sheet

Alathon L5008HP

High Density Polyethylene



Product Description

Alathon L5008HP is a bimodal, high molecular weight, high density polyethylene resin with excellent processing characteristics. L5008HP is selected by customers for pressure pipe applications including industrial piping, mining, oil & gas gathering, municipal water service lines and sewers. Please contact your LyondellBasell Technical Service Engineer or Sales Manager for an approved color and black masterbatch list. When L5008HP is combined with a LyondellBasell approved color or black masterbatch at the correct use level, this compound may meet the following standards or requirements:

- ASTM D3350 Cell Classifications: **PE445574C, PE445574E**
- NSF Standard 14 and Standard 61 for Potable Water Pipe and Fittings
- NSF Standard 358-1 for PE Pipe and Fittings for "Geothermal" Heat Pump Systems
- Plastics Pipe Institute (PPI) PE 4710 per PPI TR-3

Regulatory Status

For regulatory compliance information, see *Alathon* L5008HP [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial
Availability	North America
Application	Drinking Water 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	635	%	635	%	ASTM D638
PENT on Natural Resin, (2.4 MPa, 80 °C)	3200	hr	3200	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
Value was determined on L5008HP compounded with an approved masterbatch.					
Conformance Testing					
Hydrostatic Design Basis					
(73 °F)	1600	psi			ASTM D2837
(140 °F)	1000	psi			ASTM D2837

Notes

Typical Property values were determined on natural L5800HP resin, unless otherwise noted. Conformance Test values were determined from L5800HP compounded with an approved masterbatch.

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

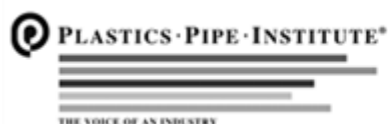
Processing Techniques

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

Caution

If an approved masterbatch is not used in the manufacture of pipe or fittings, the customer assumes all responsibility for determining that the final article meets the applicable material and pipe or fittings standards.

Certifications



Certified as meeting requirements of Plastics Pipe Institute and NSF International, as stated above.

Company Information

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