Technical Data Sheet

Alathon L5005

High Molecular Weight High Density Polyethylene

Product Description

Alathon L5005 is a high molecular weight high density copolymer that provides broad bimodal molecular weight distribution, high stiffness and good heat seal response and strength. L5005 is selected by customers for use in merchandise bags, grocery sacks, trash can liners, produce bags and roll stock.

Regulatory Status

For regulatory compliance information, see *Alathon* L5005 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Bags & Pouches; Can Liners; Retail Carryout Bags; Specialty Film
Market	Flexible Packaging
Processing Method	Blown Film

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	0.06	g/10 min	0.06	g/10 min	ASTM D1238
Density, (23 °C)	0.949	g/cm³	0.949	g/cm³	ASTM D1505
Film					
Dart Drop Impact Strength, F50	340	g	340	g	ASTM D1709
Tensile Strength at Break					
MD	12200	psi	84.1	MPa	ASTM D882
TD	8300	psi	57.2	MPa	ASTM D882
Tensile Strength at Yield					
MD	5000	psi	34.5	MPa	ASTM D882
TD	4200	psi	29.0	MPa	ASTM D882
Tensile Elongation at Break					
MD	320	%	320	%	ASTM D882
TD	390	%	390	%	ASTM D882
Secant Modulus					
MD	137000	psi	945	MPa	ASTM D882
TD	152000	psi	1050	MPa	ASTM D882
Elmendorf Tear Strength					
MD	11	g	11	g	ASTM D1922
TD	76	g	76	g	ASTM D1922

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

Film data obtained from sample produced on an Alpine 200 mm line equipped with a three layer die (40/35/25), three extruders (65 mm/75 mm/50 mm), internal bubble cooling, die gap of 1.5 mm, neck height of 8 x DD, blow up ratio of 4:1, film thickness of 0.8 mil and operating at 500 lbs/hr.

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/.

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