

Technical Data Sheet

Alathon 8005M-3

High Density Polyethylene



Product Description

Alathon 8005M-3 is a high molecular weight, high density polyethylene copolymer with broad, bimodal molecular weight distribution. Typical applications are non-pressure-rated pipes. *Alathon 8005M-3* meets the following standard:

- ASTM D3350 Cell Classifications: **PE445540A**

Regulatory Status

For regulatory compliance information, see *Alathon 8005M-3* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America; South & Central America
Application	Drainage Pipe
Market	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
Density, (23 °C)	0.949	g/cm ³	0.949	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (2% Secant)	136000	psi	938	MPa	ASTM D790
Tensile Stress at Break	5170	psi	35.6	MPa	ASTM D638
Tensile Stress at Yield	3540	psi	24.4	MPa	ASTM D638
Tensile Elongation at Break	840	%	840	%	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
Thermal					
Deflection Temperature Under Load, (66 psi, Unannealed)	169	°F	76	°C	ASTM D648
Oxidative-Induction Time, (200 °C)	>40	min	>40	min	ASTM D3895

Notes

Igepal® is a registered trademark of Rhodia.

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

Processing Techniques

LyondellBasell
Technical Data Sheet
Date: 7/25/2017

Page 1 of 3

Alathon 8005M-3
Recipient Tracking #:
Request #: 909301

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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This product(s) may not be used in the manufacture of any of the following, without prior written approval by Seller for each specific product and application:

- (i) U.S. FDA Class I or II Medical Devices; Health Canada Class I, II or III Medical Devices; European Union Class I or II Medical Devices;
- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.
- (v) safety components in automotive applications, for example: air bags, air bag unit housings and covers, seat belt mechanisms, brake systems, pedals and pedal supports, steering systems.

The product(s) may not be used in:

- (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- (ii) applications involving permanent implantation into the body;
- (iii) life-sustaining medical applications.

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