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 produced by corrugation or profile wall extrusion. *Alathon* 8005M-3 should not be used in smooth wall pipes that will contain fluids at pressures above ambient. *Alathon* 8005M-3 meets the following standard:

- ASTM D3350 Cell Classification: **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/cm³	0.949	g/cm³	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					
Low Temperature Brittleness	<-98	°F	<-72	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	169	°F	76	°C	ASTM D648
Oxidative-Induction Time, (200 °C)	>40	min	>40	min	ASTM D3895
Thermal Stability	>428	°F	>220	°C	ASTM D3350

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

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/.

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