

ExxonMobil™ BA46-055

High Density Polyethylene

Product Description

ExxonMobil™ BA46-055 is a high molecular weight high density polyethylene copolymer. It possesses a combination of excellent processability, outstanding melt strength, high impact strength, chemical resistance and high stress cracking resistance. It is often used in coex applications.

General

Availability ¹	<ul style="list-style-type: none"> Africa & Middle East Europe 	<ul style="list-style-type: none"> Latin America North America 	
Additive	<ul style="list-style-type: none"> Thermal Stabilizer: Yes 	<ul style="list-style-type: none"> Antistatic: No 	
Applications	<ul style="list-style-type: none"> Automotive Fuel Tanks Compression Moldings Drums Food Packaging 	<ul style="list-style-type: none"> Heavy Gauge Sheet Intermediate Bulk Containers Large Part Blow Molding Portable Fuel Tanks 	<ul style="list-style-type: none"> Small Engine Fuel Tanks Thermoformed Parts
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 09/08/2025 		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.946 g/cm ³	0.946 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	< 0.10 g/10 min	< 0.10 g/10 min	ASTM D1238
High Load Melt Index (190°C/21.6 kg)	5.4 g/10 min	5.4 g/10 min	ASTM D1238

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	259 °F	126 °C	ASTM D1525
Peak Melting Temperature	270 °F	132 °C	ExxonMobil Method
Crystallization Peak, T _c	241 °F	116 °C	ExxonMobil Method

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3500 psi	24 MPa	ASTM D638
Flexural Modulus			
1% Secant : 0.051 in/min (1.3 mm/min)	120000 psi	840 MPa	ASTM D790A
2% Secant	100000 psi	700 MPa	ASTM D790
Environmental Stress-Crack Resistance			ASTM D1693B
100% Igepal	> 1000 hr	> 1000 hr	
Durometer Hardness (Shore D, 15 sec)	60	60	ASTM D2240

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Charpy Notched Impact Strength			ISO 179/1eA
-4°F (-20°C)	11 ft·lb/in ²	23 kJ/m ²	
73°F (23°C)	14 ft·lb/in ²	29 kJ/m ²	

Additional Information

All molded properties were measured on compression molded plaques. BA46-055 is NSF® -51 Certified and UL recognized. Contact your ExxonMobil Chemical representative for details.

Legal Statement

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

Notes

Typical properties: these are not to be construed as specifications.

¹ Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

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