

ExxonMobil™ BA46-055

(Legacy name: Paxon™ 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	 Africa & Middle East 		Latin America		
	 Europe 		North America		
Additive	 Thermal Stabilizer: Yes 		Antistatic: No		
Applications	Automotive Fuel TanksCompression MoldingsDrumsFood Packaging		 Heavy Gauge Sheet Intermediate Bulk Containers Large Part Blow Molding Portable Fuel Tanks Small Engine Fuel Tanks Thermoformed Parts 		
Form(s)	 Pellets 				
Revision Date	• 09/08/2025				
Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density		g/cm³		g/cm³	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, Tc	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		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)		ft·lb/in²		kJ/m²	
73°F (23°C)	14	ft·lb/in²	29	kJ/m²	

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.

Effective Date: 09/08/2025 ExxonMobil Page: 1 of 2

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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