

ExxonMobil™ HD 5003

(Legacy name: Paxon™ AB50-003)

High Density Polyethylene

Product Description

ExxonMobil™ HD 5003 is a high density blow molding copolymer grade. This resin has very good stress crack resistance combined with high impact strength and rigidity.

General

Availability ¹	<ul style="list-style-type: none"> Latin America North America
Additive	<ul style="list-style-type: none"> Thermal Stabilizer: Yes Antistatic: No
Applications	<ul style="list-style-type: none"> Food Packaging Household and Industrial chemical containers Pharmaceutical Packaging Thermoformed Parts
Form(s)	<ul style="list-style-type: none"> Pellets
Revision Date	<ul style="list-style-type: none"> 08/21/2020

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.950 g/cm ³	0.950 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.25 g/10 min	0.25 g/10 min	ASTM D1238

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	156 °F	69 °C	ASTM D648
Vicat Softening Temperature	257 °F	125 °C	ASTM D1525
Peak Melting Temperature	268 °F	131 °C	ExxonMobil Method
Crystallization Peak, T _c	243 °F	117 °C	ExxonMobil Method

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3700 psi	26 MPa	ASTM D638
Flexural Modulus			
1% Secant : 0.051 in/min (1.3 mm/min)	130000 psi	920 MPa	ASTM D790A
2% Secant	110000 psi	770 MPa	ASTM D790
Environmental Stress-Crack Resistance			ASTM D1693B
100% Igepal	50 hr	50 hr	
Durometer Hardness (Shore D, 15 sec)	61	61	ASTM D2240

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Charpy Notched Impact Strength			ISO 179/1eA
-4°F (-20°C)	1.9 ft-lb/in ²	4.0 kJ/m ²	
73°F (23°C)	4.3 ft-lb/in ²	9.0 kJ/m ²	

Additional Information

All molded properties were measured on compression molded plaques. ExxonMobil™ HD 5003 is NSF® -51 Certified. Contact your ExxonMobil Chemical representative for details.

Legal Statement

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

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

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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For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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