

# ExxonMobil™ HD 5003.AS

## High Density Polyethylene

### Product Description

ExxonMobil™ HD 5003.AS is a blow molding grade high density polyethylene copolymer containing an antistatic additive. It offers very good balance of stress crack resistance, stiffness and impact strength.

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Latin America</li> <li>North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Thermal Stabilizer: Yes</li> <li>Antistatic: Yes</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Food Packaging</li> <li>Household and Industrial chemical containers</li> <li>Pharmaceutical Packaging</li> <li>Thermoformed Parts</li> <li>Thin Gauge Sheet</li> </ul>
Form(s)	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>09/26/2022</li> </ul>

### Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.950 g/cm <sup>3</sup>	0.950 g/cm <sup>3</sup>	ASTM D4883
Melt Index (190°C/2.16 kg)	0.33 g/10 min	0.33 g/10 min	ASTM D1238

### Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	161 °F	72 °C	ASTM D648
Vicat Softening Temperature	255 °F	124 °C	ASTM D1525
Peak Melting Temperature	266 °F	130 °C	ExxonMobil Method

### Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3700 psi	26 MPa	ASTM D638
Elongation at Break	730 %	730 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant	140000 psi	930 MPa	
Tangent	150000 psi	1000 MPa	
Environmental Stress-Crack Resistance			ASTM D1693
100% Igepal	60 hr	60 hr	
Durometer Hardness (15 sec)	60	60	ASTM D2240

### Impact

	Typical Value (English)	Typical Value (SI)	Test Based On
Charpy Notched Impact Strength			
-4°F (-20°C)	2.0 ft·lb/in <sup>2</sup>	4.2 kJ/m <sup>2</sup>	ISO 179
73°F (23°C)	4.1 ft·lb/in <sup>2</sup>	8.5 kJ/m <sup>2</sup>	ISO 179/1eA

### Additional Information

ExxonMobil™ HD 5003.AS is NSF® -51 Certified.

### 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.

### Processing Statement

All molded properties were measured on compression molded plaques.

### Notes

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

<sup>1</sup> 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: Contact Us](#)

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