

# ExxonMobil™ HD 49100HL

## High Density Polyethylene

### Product Description

ExxonMobil™ HD 49100HL is a high molecular weight, high density polyethylene copolymer. This resin has superior stress crack resistance, high impact strength, good rigidity, and excellent color.

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Europe</li> </ul>	<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> </ul>	<ul style="list-style-type: none"> <li>Antistatic: No</li> </ul>	
Applications	<ul style="list-style-type: none"> <li>Agriculture Products Containers</li> <li>Automotive Fittings</li> <li>Automotive Fuel Tanks - Excluding biodiesel</li> <li>Drums</li> </ul>	<ul style="list-style-type: none"> <li>Food Packaging</li> <li>Heavy Gauge Sheet</li> <li>Large Part Blow Molding</li> <li>Pallets</li> </ul>	<ul style="list-style-type: none"> <li>Portable Fuel Tanks</li> <li>Small Engine Fuel Tanks</li> <li>Thermoformed Parts</li> </ul>
Form(s)	<ul style="list-style-type: none"> <li>Pellets</li> </ul>		
Revision Date	<ul style="list-style-type: none"> <li>10/19/2020</li> </ul>		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.949 g/cm <sup>3</sup>	0.949 g/cm <sup>3</sup>	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)	10 g/10 min	10 g/10 min	ASTM D1238

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	130000 psi	920 MPa	ASTM D790
Environmental Stress-Crack Resistance 100% Igepal	> 1000 hr	> 1000 hr	ASTM D1693
Durometer Hardness (Shore D, 15 sec)	61	61	ASTM D2240

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Charpy Notched Impact Strength (73°F (23°C))	9.2 ft-lb/in <sup>2</sup>	19 kJ/m <sup>2</sup>	ISO 179/1eA

### Additional Information

ExxonMobil™ HD 49100HL is NSF® -51 Certified and UL recognized.

### Legal Statement

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

This product is not intended for use in fuel systems utilizing biodiesel including drum, portable fuel tank and small engine fuel tank applications.

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

### Processing Statement

The test specimens were prepared using ASTM D4703, Procedure C.

### 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.

ExxonMobil™ HD 49100HL  
High Density Polyethylene

[For additional technical, sales and order assistance: Contact Us](#)

©2025 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

[exxonmobilchemical.com](http://exxonmobilchemical.com)