ExxonMobil Signature Polymers

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 [1]	▪ Africa & Middle East ▪ Europe	▪ Latin America ▪ North America	
Additive	▪ Thermal Stabilizer: Yes	▪ Antistatic: No	
Applications	▪ Agriculture Products Containers ▪ Automotive Fittings ▪ Automotive Fuel Tanks - Excluding biodiesel ▪ Drums	▪ Food Packaging ▪ Heavy Gauge Sheet ▪ Large Part Blow Molding ▪ Pallets	▪ Portable Fuel Tanks ▪ Small Engine Fuel Tanks ▪ Thermoformed Parts
Form(s)	▪ Pellets		
Revision Date	▪ 10/19/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.949	g/cm³	0.949	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)	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					ASTM D1693
100% Igepal	> 1000	hr	> 1000	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 (73°F (23°C))	9.2	ft·lb/in²	19	kJ/m²	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.

[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: Contact Us

exxonmobilchemical.com