

# ExxonMobil™ HD 4850

## High Density Polyethylene

### Product Description

ExxonMobil™ HD 4850 is a narrow molecular weight hexene copolymer designed for a wide range of injection molding applications, offering excellent ESCR with good stiffness-toughness balance. Ideally suited for articles requiring rugged physical performance in cold temperature environments.

### General

Availability <sup>1</sup>	▪ Latin America	▪ North America
Additive	▪ Anti-gas fading: Yes	
Applications	▪ Automotive Components ▪ Industrial Closures	▪ Recreational Vehicle - Components ▪ Waste Carts
Revision Date	▪ 03/01/2013	

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.948 g/cm <sup>3</sup>	0.948 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238 (mod)

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	156 °F	69 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	108 °F	42 °C	ASTM D648B
Peak Melting Temperature	266 °F	130 °C	ASTM D3418

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3400 psi	23 MPa	ASTM D638
Elongation at Break	1000 %	1000 %	ExxonMobil Method
Flexural Modulus			ASTM D790B
1% Secant	160000 psi	1100 MPa	
2% Secant	140000 psi	970 MPa	
Environmental Stress-Crack Resistance			ASTM D1693B
10% Igepal, F50	20 hr	20 hr	

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (-40°F (-40°C))	1.0 ft-lb/in	55 J/m	ASTM D256

### Additional Information

- Properties are based on compression molded plaques, ASTM D4703C.
- Tensile Strength at Yield and Elongation at Break tested using ASTM D638 Type IV, 2 in/min.
- Flexural Modulus tested used ASTM D790B, 0.5 in/min.

### 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.

<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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