

ExxonMobil™ HD 4850 Series

High Density Polyethylene

Product Description

HD 4850 is a high density hexene copolymer designed to offer outstanding stiffness and processability. This resin is ideally suited for applications that require the optimum balance of stiffness, processability and surface appearance.

General

Availability ¹	<ul style="list-style-type: none"> Latin America North America
Additive	<ul style="list-style-type: none"> HD 4850R.UV: Long Term UV-20 Stabilizer: Yes HD 4850Rp.UV: Long Term UV-20 Stabilizer: Yes
Applications	<ul style="list-style-type: none"> Consumer Articles RV tanks
Form(s)	<ul style="list-style-type: none"> HD 4850R.UV: Pellets HD 4850Rp.UV: Powder
Revision Date	<ul style="list-style-type: none"> 09/01/2014

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.948 g/cm ³	0.948 g/cm ³	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)
Peak Melting Temperature	266 °F	130 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	153 °F	67 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	104 °F	40 °C	ASTM D648

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield 2.0 in/min (50 mm/min)	3200 psi	22 MPa	ASTM D638
Elongation at Yield (2.0 in/min (50 mm/min))	10 %	10 %	ASTM D638
Flexural Modulus - 1% Secant	150000 psi	1000 MPa	ASTM D790B
Environmental Stress-Crack Resistance			ASTM D1693A
10% Igepal, F50	20 hr	20 hr	
100% Igepal, F50	20 hr	20 hr	

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Impact Strength			ARM
-40°F (-40°C), 0.125 in (3.18 mm)	55 ft·lb	75 J	
-40°F (-40°C), 0.250 in (6.35 mm)	140 ft·lb	190 J	

Additional Information

- All physical properties were measured on 3 mm. rotomolded samples unless a different value is shown, except for ESCR, which was measured on compression molded samples.
- Tensile testing was conducted at a crosshead speed of 50 mm/min. The tensile strength reported refers to the maximum stress reached during the test.
- Test procedures may be modified to accommodate operating conditions or facility limitations.

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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