

ExxonMobil™ HD 4850 Series

(Legacy name: ExxonMobil™ HDPE HD 8760 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	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			ASTM D638
2.0 in/min (50 mm/min)	3200 psi	22 MPa	
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.

ExxonMobil™ HD 4850 Series
High Density Polyethylene

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

©2024 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