ExxonMobil

ExxonMobil™ HDPE HD 8660 Series

High Density Polyethylene Resin

Product Description

HD 8660 Series are high density hexene copolymers designed to offer superior toughness and stiffness. They are ideally suited for applications that require the optimum balance of low temperature toughness, creep resistance, stiffness, ESCR, and tear properties.

General

Availability [1]	• Latin America	• North America	
Additive	• HDP8660.29: Long Term UV-15 Stabilizer: Yes	• HD 8660.29: Long Term UV-15 Stabilizer: Yes	
Applications	• Industrial Products	• Intermediate Bulk Containers	• Large Agricultural Tanks
Revision Date	• 09/01/2014		

Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density	0.941	g/cm³	0.941	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	2.0	g/10 min	ASTM D1238 (mod)

Thermal	Typical Value	(English)	Typical Value	(SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	135	°F	57	°C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	100	°F	38	°C	ASTM D648
Peak Melting Temperature	264	°F	129	°C	ASTM D3418

Molded Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield					ASTM D638
2.0 in/min (50 mm/min)	2800	psi	19	MPa	
Elongation at Yield (2.0 in/min (50 mm/min))	10	%	10	%	ASTM D638
Flexural Modulus - 1% Secant	130000	psi	900	MPa	ASTM D790B
Environmental Stress-Crack Resistance					ASTM D1693A
10% Igepal, F50	40	hr	40	hr	
100% Igepal, F50	560	hr	560	hr	

Impact	Typical Value	(English)	Typical Value	(SI)	Test Based On
Impact Strength					ARM
-40°F (-40°C), 0.125 in (3.18 mm)	68	ft·lb	92	J	
0.250 in (6.35 mm)	190	ft·lb	258	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.