

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

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

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.941 g/cm ³	0.941 g/cm ³	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 2.0 in/min (50 mm/min)	2800 psi	19 MPa	ASTM D638
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	

