

# ExxonMobil™ HDPE HD 6704.18

## High Density Polyethylene Copolymer Resin

### Product Description

HD 6704 is a narrow molecular weight hexene copolymer designed for outstanding balance of ESCR, Toughness, and Stiffness properties. This resin is ideally suited for heavy-duty applications that require robust performance in conditions ranging from ambient to sub-zero temperatures.

### General

Additive	▪ Antioxidant: Yes	
Applications	▪ Industrial Caps & Closures ▪ Industrial Pails	▪ Packaging Drum Lids ▪ Recreational Vehicle - Components

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.952 g/cm <sup>3</sup>	0.952 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.5 g/10 min	4.5 g/10 min	ASTM D1238 (mod)

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	158 °F	70 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	112 °F	44 °C	ASTM D648B
Peak Melting Temperature	271 °F	133 °C	ASTM D3418

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3800 psi	26 MPa	ASTM D638
Elongation at Break	1200 %	1200 %	ExxonMobil Method
Flexural Modulus			ASTM D790B
1% Secant	190000 psi	1300 MPa	
2% Secant	170000 psi	1100 MPa	
Environmental Stress-Crack Resistance			ASTM D1693B
10% Igepal, F50	6 hr	6 hr	

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (-40°F (-40°C))	1.1 ft-lb/in	59 J/m	ASTM D256

