

ExxonMobil® HD 6704.18

Product Description: HD 6704 is a narrow molecular weight hexane 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.

Physical Properties	Metric	English	Comments
Density	0.952 g/cc	0.0344 lb/in ³	ASTM D4883
Environmental Stress Crack Resistance	6.0 hour	6.0 hour	Cond. B, 10%; ASTM D1693
Melt Flow	4.5 g/10 min @Load 2.16 kg, Temperature 190 °C	4.5 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	26.20 MPa	3800 psi	ASTM D638
Elongation at Break	1200 %	1200 %	ASTM D638
Flexural Modulus	1.17 GPa @Strain 2 %	170 ksi @Strain 2 %	Secant; ASTM D790
Flexural Modulus, 1% Secant	1310 MPa	190000 psi	ASTM D790
Izod Impact, Notched	0.587 J/cm @Temperature -40.0 °C	1.10 ft-lb/in @Temperature -40.0 °F	ASTM D256

Thermal Properties	Metric	English	Comments
Melting Point	132 °C	270 °F	ASTM D3418
Deflection Temperature at 0.46 MPa (66 psi)	66.6 °C	152 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	39.0 °C	102 °F	ASTM D648

Descriptive Properties	
Features	Standard Processing Antioxidants Stabilizer
Form	Pellet