

Product Datasheet

ExxonMobil™ HDPE HD 8512 Series

High Density Polyethylene Resin



Product Description

ExxonMobil™ HD 8512 is a high density hexene copolymer designed to offer outstanding stiffness and toughness. This resin is 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	HDP8512.29: Long Term UV-15 Stabilizer: Yes	HD 8512.29: Long Term UV-15 Stabilizer: Yes
Applications	Chemical Storage Tanks Industrial Products	Intermediate Bulk Containers Septic Tanks Water Tanks
Form(s)	Pellets	Powder
Revision Date	04/30/2020	

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.944 g/cm ³	0.944 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	1.3 g/10 min	1.3 g/10 min	ASTM D1238
Peak Melting Temperature	264 °F	129 °C	ExxonMobil Method

Thermal

	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	142 °F	61 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	102 °F	39 °C	ASTM D648

Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield 2.0 in/min (50 mm/min)	3200 psi	22 MPa	ASTM D638
Elongation at Yield (2.0 in/min (50 mm/min))	10 %	10 %	ASTM D638
Flexural Modulus - 1% Secant	130000 psi	870 MPa	ASTM D790B
Environmental Stress-Crack Resistance 10% Igepal, F50	50 hr	50 hr	ASTM D1693A
100% Igepal, F50	200 hr	200 hr	

Impact

	Typical Value (English)	Typical Value (SI)	Test Based On
Impact Strength			ARM
-40°F (-40°C), 0.125 in (3.18 mm)	52 ft·lb	71 J	
-40°F (-40°C), 0.250 in (6.35 mm)	175 ft·lb	237 J	

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.

Processing Statement

All physical properties were measured on 3 mm rotomolded samples unless a different value is shown. ESCR was measured on compression molded plaques.

Tensile Strength at Yield and Elongation at Yield tested using ASTM D638 Type IV, 2 in/min. Flexural Modulus was measured at 0.5 in/min.

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.

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

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