ExxonMobil Signature Polymers

ExxonMobil™ HD 5245.18

High Density Polyethylene

Product Description

ExxonMobil™ HD 5245.18 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

Availability [1]	▪ Latin America	▪ North America
Additive	▪ Antioxidant: Yes	
Applications	▪ Industrial Caps & Closures ▪ Industrial Pails	▪ Packaging Drum Lids ▪ Recreational Vehicle - Components
Revision Date	▪ 03/13/2015	

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.952	g/cm³	0.952	g/cm³	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

Additional Information

- Properties are based on compression molded samples.
- Test procedures may be modified to accommodate operating conditions or facility limitations. (Industrial Pails to Meet UN9)
- Tensile Strength at Yield and Elongation at Break tested using ASTM D638 Type IV, 50 mm/min.

Legal Statement

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

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: Contact Us

exxonmobilchemical.com