Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ HD 52190 Series

High Density Polyethylene

Product Description

ExxonMobil™ HD 52190 is a narrow molecular weight hexene copolymer designed for a wide range of injection molding applications, combining easy processability with good toughness properties. Ideally suited for articles requiring low warpage, glossy surfaces and cold temperature impact resistance.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ HD 52190: Antioxidant: Yes		
Applications	▪ Food Packaging Containers ▪ Houseware Articles	▪ Lawn & Garden Accessories ▪ Soda Carrier Totes	▪ Toys
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)	19.0	g/10 min	19.0	g/10 min	ASTM D1238 (mod)
Peak Melting Temperature	267	°F	131	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	164	°F	73	°C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	114	°F	46	°C	ASTM D648B

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield	3700	psi	26	MPa	ASTM D638
Elongation at Break	270	%	270	%	ExxonMobil Method
Flexural Modulus					ASTM D790B
1% Secant	180000	psi	1300	MPa	
2% Secant	160000	psi	1100	MPa	
Environmental Stress-Crack Resistance					ASTM D1693B
10% Igepal, F50	< 1	hr	< 1	hr	

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact (-40°F (-40°C))	0.61	ft·lb/in	32	J/m	ASTM D256

Additional Information

- Properties are based on compression molded plaques, ASTM D4703C.
- Tensile Strength at Yield and Elongation at Break tested using ASTM D638 Type IV, 2 in/min.
- Flexural Modulus tested used ASTM D790B, 0.5 in/min.

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.

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.

Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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For additional technical, sales and order assistance: Contact Us

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