Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ HD 54300

High Density Polyethylene

Product Description

HD 54300 is an easy flow HDPE grade, characterized by high gloss and dimensional stability.

General

Availability [1]	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ Thermal Stabilizer: Yes	▪ UV Stabilizer: No	
Applications	▪ Food Packaging Containers	▪ Housewares - Multicavity Thin-Walled	
Revision Date	▪ 01/01/2017		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.954	g/cm³	0.954	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	30	g/10 min	30	g/10 min	ASTM D1238

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Heat Deflection Temperature (0.45 MPa)	144	°F	62	°C	ISO 75-2/B
Peak Melting Temperature	268	°F	131	°C	ASTM D3418

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Stress at Yield	3300	psi	23	MPa	ISO 527-2/1A/50
Tensile Strain at Yield	10	%	10	%	ISO 527-2/1A/50
Tensile Strain at Break	> 100	%	> 100	%	ISO 527-2/1A/50
Flexural Modulus	140000	psi	950	MPa	ISO 178
Environmental Stress-Crack Resistance					ASTM D1693
122°F (50°C), 10% Igepal	< 1	hr	< 1	hr	

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact Strength	1.6	ft·lb/in²	3.4	kJ/m²	ISO 180/1A

Additional Information

The molded properties were measured on 4 mm (157.5 mil) thick injection molded specimen based on ISO 294-1.

Heat Deflection temperature sample preparation, injection based on ISO1872. Tested flatwise position with specimen size of 80mm x 10mm x 4mm.

ESCR was measured on 2 mm (78.7 mil) thick compression molded plate (F50, 10 % Igepal, 50°C, 122°F)

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