Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ HD 5290HLZ

High Density Polyethylene

Product Description

ExxonMobil™ HD 5290HLZ is a high molecular weight HDPE resin, characterized by an excellent balance of rigidity, ESCR and impact strength.

General

Availability [1]	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ Thermal Stabilizer: Yes		
Applications	▪ Drainage Pipes ▪ Heavy Gauge Sheet ▪ Large Part Blow Molding ▪ Large Parts & Containers (20 to 100 L) for non-food end uses		
Revision Date	▪ 04/03/2023		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.952	g/cm³	0.952	g/cm³	ASTM D1505
High Load Melt Index (190°C/21.6 kg)	9.0	g/10 min	9.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	0.35	g/10 min	0.35	g/10 min	ASTM D1238

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	259	°F	126	°C	ASTM D1525

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Modulus (0.20 in/min (5.0 mm/min))	150000	psi	1000	MPa	ASTM D638
Tensile Stress at 100%					ASTM D638
2.0 in/min (50 mm/min)	2000	psi	14	MPa	
Tensile Strength at Yield					ASTM D638
2.0 in/min (50 mm/min)	3000	psi	21	MPa	
Elongation at Break (2.0 in/min (50 mm/min))	> 100	%	> 100	%	ASTM D638
Environmental Stress-Crack Resistance					ASTM D1693
10% Igepal	330	hr	330	hr	
100% Igepal	> 600	hr	> 600	hr	
Durometer Hardness (Shore D, 15 sec)	61		61		ASTM D2240

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact Strength	8.6	ft·lb/in²	18	kJ/m²	ISO 180/1A

Legal Statement

This product is not intended for use in food contact application.

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

Processing Statement

The molded properties have been measured on compression molded sheets, prepared according to ASTM D4703 and ASTM D 638. ASTM D 638: Specimen type T1 / thickness 3 mm (118 mil); tensile modulus : speed of testing 5 mm/min (197 mil/min); tensile strength at yield and elongation at break: speed of testing 50 mm/min (1970 mil/min). ASTM D1693: Conditions B, F50, 10 % Igepal and 100 % Igepal

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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