Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ HDPE HYA 900

High Density Polyethylene Resin

Product Description

ExxonMobil™ HDPE HYA 900 is a homopolymer HDPE grade, characterized by high stiffness, high rigidity and high flow.

General

Availability [1]	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ Thermal Stabilizer: Yes		
Applications	▪ Drainage Pipes	▪ Food Packaging	▪ Liquid Food Containers for Milk, Water and Juices
Revision Date	▪ 10/13/2021		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.961	g/cm³	0.961	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.70	g/10 min	0.70	g/10 min	ASTM D1238
High Load Melt Index (190°C/21.6 kg)	46	g/10 min	46	g/10 min	ASTM D1238

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Modulus (0.20 in/min (5.0 mm/min))	200000	psi	1400	MPa	ASTM D638
Tensile Stress at 100%					ASTM D638
2.0 in/min (50 mm/min)	2100	psi	14	MPa	
Tensile Strength at Yield					ASTM D638
2.0 in/min (50 mm/min)	3600	psi	25	MPa	
Elongation at Break (2.0 in/min (50 mm/min))	> 100	%	> 100	%	ASTM D638
Environmental Stress-Crack Resistance					ASTM D1693
10% Igepal	< 20	hr	< 20	hr	
100% Igepal	< 20	hr	< 20	hr	
Durometer Hardness (Shore D, 15 sec)	62		62		ASTM D2240

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact Strength	4.5	ft·lb/in²	9.5	kJ/m²	ISO 180/1A

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

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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