

ExxonMobil™ HDPE HYA 800

High Density Polyethylene Resin

Product Description

HYA 800 is a homopolymer HDPE grade, characterized by high stiffness, high rigidity and high flow.

General

Additive ▪ Thermal Stabilizer: Yes

Applications ▪ Drainage Pipes ▪ Food packaging ▪ Liquid Food Containers for Milk, Water and Juices

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.961 g/cm ³	0.961 g/cm ³	ExxonMobil Method
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% 2.0 in/min (50 mm/min)	2000 psi	14 MPa	ASTM D638
Tensile Strength at Yield 2.0 in/min (50 mm/min)	3600 psi	25 MPa	ASTM D638
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/in ²	9.5 kJ/m ²	ISO 180/1A

