

ExxonMobil™ HDPE HYA 600

High Density Polyethylene Resin

Product Description

HYA 600 is a general purpose HDPE resin, characterized by very easy processability, an excellent balance of rigidity and impact strength and a good ESCR.

General

Additive	▪ Thermal Stabilizer: Yes		
Applications	▪ Drainage Pipes	▪ Food packaging	▪ Household and Industrial chemical containers

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.954 g/cm ³	0.954 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	0.35 g/10 min	0.35 g/10 min	ASTM D1238
High Load Melt Index (190°C/21.6 kg)	29 g/10 min	29 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))	160000 psi	1100 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)	3300 psi	23 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	< 50 hr	< 50 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	4.7 ft-lb/in ²	9.9 kJ/m ²	ISO 180/1A

