

ExxonMobil HDPE

HYA 600

Blow Molding Resin

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.

Applications

- bottles for household, industry and chemicals
- containers up to 30 l.

Additive Package

HYA 600

Thermal Stabilizer

Yes

Resin Properties

Melt Index (21.6 kg, 47.6 lb)

Melt Index (2.16 kg, 4.76 lb)

Density

Vicat Softening Point

Test Based On

ASTM D 1238

ASTM D 1238

ExxonMobil Method

ASTM D 1525

Typical Value / Unit

29 g/10 min

0.35 g/10 min

0.954 g/cm³

128 °C

262 °F

Molded Properties

Tensile Strength at Yield¹

ASTM D 638

27 MPa

3900 psi

Tensile Strength at Break¹

ASTM D 638

> 15 MPa

> 2200 psi

Elongation at Break¹

ASTM D 638

> 450 %

1% Secant Modulus²

ASTM D 638

900 MPa

130500 psi

IZOD Impact

ASTM D 256

14 KJ/m²

6.7 ft-lb/in²

Shore Hardness, D

ASTM D 2240

62

Environmental Stress Crack Resistance³

ASTM D 1693

22 hrs

Environmental Stress Crack Resistance⁴

ASTM D 1693

53 hrs

The molded properties have been measured on compression molded sheets, prepared according to ASTM D 4703.

(1) Specimen type T4 / thickness 3 mm (118 mil) speed of testing 50 mm/min (1970 mil/min).

(2) Specimen type T4 / thickness 3 mm (118 mil) speed of testing 5 mm/min (197 mil/min).

(3) Conditions B, F50, 10 % Igepal

(4) Conditions B, F50, 100 % Igepal

HYA 600 can - in principle - be used in food contact applications in various EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

Revised January 2006