

ExxonMobil HDPE

HPA 020

Blow Molding Resin

Description

HPA 020 is a high molecular weight HDPE resin, characterized by an excellent balance of rigidity, ESCR and impact strength.

Applications

- large parts & containers (20 to 100 l) for non - food end uses
- non pressure pipes for use in construction industry

Additive Package

HPA 020

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

9 g/10 min

0.07 g/10 min

0.952 g/cm³

129 °C

257 °F

Molded Properties

Tensile Strength at Yield¹

Tensile Strength at Break¹

Elongation at Break¹

1 ~ Secant Modulus²

IZOD Impact

Shore Hardness, D

Environmental Stress Crack Resistance³

Environmental Stress Crack Resistance⁴

ASTM D 638

ASTM D 638

ASTM D 638

ASTM D 638

ASTM D 256

ASTM D 2240

ASTM D 1693

ASTM D 1693

26 MPa

> 17 MPa

> 450 %

850 MPa

38 KJ/m²

63

> 300 hrs

> 600 hrs

3750 psi

> 2450 psi

123500 psi

18.1 ft-lb/in²

The molded properties have been measured on compression molded sheets, prepared according to ASTM D4703.

(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

HPA 020 is not to be used for food contact applications.

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