

# 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	Test Based On	Typical Value / Unit	
Melt Index (21.6 kg, 47.6 lb)	ASTM D 1238	9 g/10 min	
Melt Index (2.16 kg, 4.76 lb)	ASTM D 1238	0.07 g/10 min	
Density	ExxonMobil Method	0.952 g/cm <sup>3</sup>	
Vicat Softening Point	ASTM D 1525	129 °C	257 °F

#### Molded Properties

Tensile Strength at Yield <sup>1</sup>	ASTM D 638	26 MPa	3750 psi
Tensile Strength at Break <sup>1</sup>	ASTM D 638	> 17 MPa	> 2450 psi
Elongation at Break <sup>1</sup>	ASTM D 638	> 450 %	
1% Secant Modulus <sup>2</sup>	ASTM D 638	850 MPa	123500 psi
IZOD Impact	ASTM D 256	38 KJ/m <sup>2</sup>	18.1 ft-lb/in <sup>2</sup>
Shore Hardness, D	ASTM D 2240	63	
Environmental Stress Crack Resistance <sup>3</sup>	ASTM D 1693	> 300 hrs	
Environmental Stress Crack Resistance <sup>4</sup>	ASTM D 1693	> 600 hrs	

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.