

# ExxonMobil HDPE

## HMA 018

Injection Molding Resin

### Description

HMA 018 is an easy flow HDPE grade, characterized by high gloss and dimensional stability.

### Applications

- multicavity thin-walled housewares
- food containers

### Additive Package

HMA 018

### Thermal Stabilizer

Yes

Resin Properties	Test Based On	Typical Value / Unit	
Melt Index (2.16 kg, 4.76 lb)	ASTM D1238	30 g/10 min	
Density	ASTM D4703 / D1505	0.954 g/cm <sup>3</sup>	
Peak Melting Temperature	ASTM D3418	129 °C	264 °F
Crystallization Point	ASTM D3418	113 °C	235 °F

### Molded Properties

Flexural Modulus (0.05 - 0.25 %)	ISO 178	900 MPa	130500 psi
Yield Strength	ISO 527-2/1A/50	22 MPa	3200 psi
Elongation @ Break	ISO 527-2/1A/50	> 100 %	
Elongation @ Yield	ISO 527-2/1A/50	10 %	
IZOD Impact	ISO 180-1A	4 kJ/m <sup>2</sup>	1.9 ft-lb/in <sup>2</sup>
Temperature of deflection under load (*)	ISO 75-Be	67 °C	153 °F
Environmental Stress Crack Resistance (**)	ASTM D1693	< 1 hr	

The molded properties were measured on 4 mm (157.5 mil) thick injection molded specimen based on ISO 1872-2.

(\*) 0.45 MPa, 70 psi

(\*\*) ESCR was measured on 2 mm (78.7 mil) thick compression molded plate (F50, 10 % Igepal, 50 °C, 122 °F)

HMA 018 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.

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