

ExxonMobil™ HDPE HMA 018

High Density Polyethylene Resin

Product Description

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

General

Additive	• Thermal Stabilizer: Yes	• UV Stabilizer: No
Applications	• Food Packaging Containers	• Housewares - Multicavity Thin-Walled

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)	30 g/10 min	30 g/10 min	ASTM D1238

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (0.45 MPa)	147 °F	64.0 °C	ISO 75-2/B
Melting Temperature	264 °F	129 °C	ASTM D3418

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at Yield	3190 psi	22.0 MPa	ISO 527-2/1A/50
Tensile Strain at Yield	10 %	10 %	ISO 527-2/1A/50
Tensile Strain at Break	> 100 %	> 100 %	ISO 527-2/1A/50
Flexural Modulus	131000 psi	900 MPa	ISO 178
Environmental Stress-Crack Resistance 10% Igepal	< 1.00 hr	< 1.00 hr	ASTM D1693

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact Strength	1.9 ft-lb/in ²	4.0 kJ/m ²	ISO 180/1A

Additional Information

The molded properties were measured on 4 mm (157.5 mil) thick injection molded specimen based on ISO 294-1.

1. 0.45 MPa, 70 psi

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

