

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

| | | | |
|---------------------------|-----------------------------|----------------------------------------|----------|
| Availability ¹ | ▪ Africa & Middle East | ▪ Asia Pacific | ▪ Europe |
| Additive | ▪ Thermal Stabilizer: Yes | ▪ UV Stabilizer: No | |
| Applications | ▪ Food Packaging Containers | ▪ Housewares - Multicavity Thin-Walled | |
| Revision Date | ▪ 01/01/2017 | | |

| Resin Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|----------------------------|-------------------------|-------------------------|---------------|
| Density | 0.954 g/cm ³ | 0.954 g/cm ³ | ASTM D1505 |
| 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) | 144 °F | 62 °C | ISO 75-2/B |
| Peak Melting Temperature | 268 °F | 131 °C | ASTM D3418 |

| Molded Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------------------------------------------|-------------------------|--------------------|-----------------|
| Tensile Stress at Yield | 3300 psi | 23 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 | 140000 psi | 950 MPa | ISO 178 |
| Environmental Stress-Crack Resistance 122°F (50°C), 10% Igepal | < 1 hr | < 1 hr | ASTM D1693 |

| Impact | Typical Value (English) | Typical Value (SI) | Test Based On |
|------------------------------|---------------------------|-----------------------|---------------|
| Notched Izod Impact Strength | 1.6 ft-lb/in ² | 3.4 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.

Heat Deflection temperature sample preparation, injection based on ISO1872. Tested flatwise position with specimen size of 80mm x 10mm x 4mm.

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

Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

Notes

Typical properties: these are not to be construed as specifications.

¹ Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

ExxonMobil™ HDPE HMA 018
High Density Polyethylene Resin

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

©2020 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Chemical" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com