

# ExxonMobil™ HDPE HPA 020HD5 Molding

## High Density Polyethylene (HMW) Resin

### Product Description

HPA 020HD5 is a high molecular weight HDPE resin, characterized by an excellent balance of rigidity, ESCR and impact strength.

### General

Availability <sup>1</sup>	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ Thermal Stabilizer: Yes		
Applications	<ul style="list-style-type: none"> <li>▪ Drainage Pipes</li> <li>▪ Heavy Gauge Sheet</li> <li>▪ Large Part Blow Molding</li> <li>▪ Large Parts &amp; Containers (20 to 100 L) for non-food end uses</li> </ul>		
Revision Date	▪ 09/15/2016		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.952 g/cm <sup>3</sup>	0.952 g/cm <sup>3</sup>	ASTM D1505
High Load Melt Index (190°C/21.6 kg)	9.0 g/10 min	9.0 g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	0.35 g/10 min	0.35 g/10 min	ASTM D1238

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	259 °F	126 °C	ASTM D1525

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Modulus (0.20 in/min (5.0 mm/min))	150000 psi	1000 MPa	ASTM D638
Tensile Stress at 100% 2.0 in/min (50 mm/min)	2000 psi	14 MPa	ASTM D638
Tensile Strength at Yield 2.0 in/min (50 mm/min)	3000 psi	21 MPa	ASTM D638
Elongation at Break (2.0 in/min (50 mm/min))	> 100 %	> 100 %	ASTM D638
Environmental Stress-Crack Resistance			ASTM D1693
10% Igepal	330 hr	330 hr	
100% Igepal	> 600 hr	> 600 hr	
Durometer Hardness (Shore D, 15 sec)	61	61	ASTM D2240

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact Strength	8.6 ft-lb/in <sup>2</sup>	18 kJ/m <sup>2</sup>	ISO 180/1A

### Legal Statement

This product is not intended for use in food contact application.

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

### Processing Statement

The molded properties have been measured on compression molded sheets, prepared according to ASTM D4703 and ASTM D 638. ASTM D 638: Specimen type T1 / thickness 3 mm (118 mil); tensile modulus : speed of testing 5 mm/min (197 mil/min); tensile strength at yield and elongation at break: speed of testing 50 mm/min (1970 mil/min). ASTM D1693: Conditions B, F50, 10 % Igepal and 100 % Igepal

### Notes

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

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

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