

ExxonMobil™ HDPE HPA 020HD5 Wire & Cable

High Density Polyethylene Resin

Product Description

HPA 020HD5 is a HDPE grade for Medium/High Voltage power cable jacketing. The grade should be used in blends with LLDPE to improve Environmental Stress Crack Resistance (ESCR). Sufficient Carbon Black or UV stabilizer should be added to meet cable jacketing specifications.

General

Availability ¹	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Applications	▪ Automotive wiring compounds	▪ MV/HV thermoplastic jacketing	▪ Telecom / Data / LAN cable insulation
Form(s)	▪ Pellets		
Revision Date	▪ 09/15/2016		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.952 g/cm ³	0.952 g/cm ³	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	264 °F	129 °C	ASTM D1525

Molded Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3900 psi	27 MPa	ASTM D638
Tensile Strength at Break	4800 psi	33 MPa	ASTM D638
Elongation at Yield	9 %	9 %	ASTM D638
Elongation at Break	840 %	840 %	ASTM D638
Flexural Modulus - 1% Secant	140000 psi	960 MPa	ASTM D790
Durometer Hardness (Shore D, 15 sec)	63	63	ASTM D2240

Electrical

	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Resistivity	6.5E+16 ohms·cm	6.5E+16 ohms·cm	ASTM D257
Dielectric Constant (60 Hz)	2.1	2.1	ASTM D150
Dissipation Factor (60 Hz)	4E-4	4E-4	ASTM D150

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

Specimens were compression molded in accordance with ASTM D4703. The value listed as Density, ASTM D1505, was tested in accordance with EMC test methods.

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 HPA 020HD5 Wire & Cable
High Density Polyethylene Resin

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

©2024 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 Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com