

SABIC® LDPE HP20023

LOW DENSITY POLYETHYLENE - REGION
GLOBAL

DESCRIPTION

HP20023 is an additive free low density polyethylene grade with high melt flow, offering good processability and capability to accept high pigment loading during compounding.

TYPICAL APPLICATIONS

Base resin for masterbatch compounding for high loading carbon black, titanium dioxide and color pigments. Injection molding for flexible household articles, lids and caps.

TYPICAL PROPERTY VALUES

Revision 20170418

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 190°C and 2.16 kg	20	g/10 min	ASTM D1238
Density			
at 23°C	923	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile Properties ⁽¹⁾			
1% secant modulus	225	MPa	ASTM D638
stress at yield	8	MPa	ASTM D638
stress at break	9	MPa	ASTM D638
strain at break	150	%	ASTM D790
Flexural properties ⁽¹⁾			
flexural strength	7	MPa	ASTM D790
flexural modulus	175	MPa	ASTM D790
Izod Impact Strength ⁽¹⁾	500	J/m	ASTM D256
Hardness Shore D ⁽¹⁾	45	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽¹⁾	6	hrs	ASTM D1693B
ESCR (10% Igepal), F50 ⁽¹⁾	2	hrs	ASTM D1693B
THERMAL PROPERTIES			
Vicat Softening Temperature	92	°C	ASTM D1525
Peak Melting Temperature	112	°C	ASTM D3418
Crystallization Temperature	98	°C	ASTM D3418

(1) Based on injection molded specimens.

PROCESSING CONDITIONS

Typical molding conditions for HP20023 are:

Barrel temperature: 160 - 200°C, Mold temperature: 20 - 40°C

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

HP20023 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical/medical applications.

STORAGE AND HANDLING

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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