

# HP20023

Low Density Polyethylene for Compounding

Revision Date April, 2016

## PRODUCT 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:

RESIN PROPERTIES	Unit	Value <sup>(1)</sup>	ASTM Method
Melt Flow Rate @ 190°C & 2.16 Kg load	g/10 min.	20	D 1238
Density	Kg/m <sup>3</sup>	923	D 1505
<b>MECHANICAL PROPERTIES<sup>(2)</sup></b>			
1% Secant Modulus	MPa	225	D 638
Tensile Strength @ Yield	MPa	8	D 638
Tensile Strength @ Break	MPa	9	D 638
Tensile Elongation @ Break	%	150	D 638
Flexural Strength	MPa	7	D 790
Flexural Modulus	MPa	175	D 790
Izod Impact	J/m	500	D 256
Hardness (Shore D)	-	45	D 2240
ESCR (100% Igepal, F <sub>50</sub> )*	Hrs	6	D 1693B
ESCR (10% Igepal, F <sub>50</sub> )*	Hrs	2	D 1693B
<b>THERMAL PROPERTIES</b>			
Crystalline Melting Point	°C	98	D 794
Vicat Softening Point	°C	92	D 1525

(1) Typical values; not to be construed as specification limits.

(2) Based on injection molded specimens

\* Based on compression molded sheet

### **PROCESSING CONDITIONS:**

Typical molding conditions for HP20023 are:

Barrel temperature: 160 - 200°C

Mold temperature: 20 – 40°C

### **HEALTH, SAFETY AND FOOD 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 & 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.