

# SABIC® HDPE M40060

HIGH DENSITY POLYETHYLENE

## DESCRIPTION

M40060 is High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give good rigidity, excellent toughness and low warp age.

## TYPICAL APPLICATIONS

M40060 series grades are recommended for industrial pails, shipping containers and other parts requiring balance of toughness and rigidity.

## TYPICAL PROPERTY VALUES

Revision 20220720

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
@ 190°C & 2.16 kg load	4	g/cc	ASTM D1238
Density at 23°C <sup>(1)</sup>	960	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
1% Secant Modulus <sup>(2)</sup>	950	MPa	ASTM D638
Tensile Strength at Yield	24	MPa	ASTM D638
Tensile Strength at Break	22	MPa	ASTM D638
Tensile Elongation at Break	>600	%	ASTM D638
Flexural Strength	24	MPa	ASTM D790
Flexural Modulus	900	MPa	ISO 178/1A
Izod Impact Strength	180	J/m	ASTM D256
Hardness (Shore D)	60	-	ASTM D2240
ESCR (100% Igepal), F50 <sup>(3)</sup>	6	Hrs	ASTM D1693B
ESCR (10% Igepal), F50	3	Hrs	ASTM D1693B
<b>THERMAL PROPERTIES</b>			
Vicat Softening Point	125	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

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

(2) Based on Injection molded specimens.

(3) Based on compression molded sheet

## PROCESSING CONDITIONS

Typical processing conditions for M40060 are: Melt temperature: 190-250°C Mold temperature: 15-60°C

## FOOD REGULATION

M40060 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 material 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 don't 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

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.