

# 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

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
<b>Density at 23°C <sup>(1)</sup></b>	960	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>1% Secant Modulus <sup>(2)</sup></b>	950	MPa	ASTM D638
<b>Tensile Strength at Yield</b>	24	MPa	ASTM D638
<b>Tensile Strength at Break</b>	22	MPa	ASTM D638
<b>Tensile Elongation at Break</b>	>600	%	ASTM D638
<b>Flexural Strength</b>	24	MPa	ASTM D790
<b>Flexural Modulus</b>	900	MPa	ISO 178/1A
<b>Izod Impact Strength</b>	180	J/m	ASTM D256
<b>Hardness (Shore D)</b>	60	-	ASTM D2240
<b>ESCR (100% Igepal), F50 <sup>(3)</sup></b>	6	Hrs	ASTM D1693B
<b>ESCR (10% Igepal), F50</b>	3	Hrs	ASTM D1693B
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Point</b>	125	°C	ASTM D1525
<b>Brittleness Temperature</b>	<-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