

# SABIC® HDPE M200056

HIGH DENSITY POLYETHYLENE FOR INJECTION MOLDING

## DESCRIPTION

M200056 is a High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give good flow properties, low warp age with good dimensional stability and high gloss.

## TYPICAL APPLICATIONS

M200056 is recommended for housewares, food containers, toys, caps and closures etc.

## TYPICAL PROPERTY VALUES

Revision 20231122

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
at 190°C and 2.16 kg	20	g/10 min	ASTM D1238
<b>Density at 23°C <sup>(1)</sup></b>	956	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>1% Secant Modulus</b>	800	MPa	ASTM D638
<b>Tensile Strength at Yield</b>	24	MPa	ASTM D638
<b>Tensile Strength at Break</b>	12	MPa	ASTM D638
<b>Tensile Elongation at Break</b>	>200	%	ASTM D638
<b>Flexural Strength</b>	23	MPa	ASTM D790
<b>Flexural Modulus</b>	825	MPa	ISO 178/1A
<b>Izod Impact Strength <sup>(2)</sup></b>	30	J/m	ASTM D256
<b>Hardness (Shore D)</b>	60	-	ASTM D2240
<b>ESCR (100% Igepal), F50 <sup>(3)</sup></b>	3	Hrs	ASTM D1693B
<b>ESCR (10% Igepal), F50</b>	2	Hrs	ASTM D1693B
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Point</b>	124	°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 M200056 are:

Melt temperature: 180 - 250°C

Mold temperature: 15-60°C

Injection pressure: 600 - 1000 Bar



## 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.

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