

# SABIC® HDPE M80064S

## HIGH DENSITY POLYETHYLENE

### DESCRIPTION

M80064S is a UV stabilized, High Density Polyethylene injection molding grade with a narrow molecular weight distribution. It is typically used for injection molding applications where rigidity, toughness and warp resistance are required. Typical moulding conditions for SABIC® HDPE M80064S are: This product is not intended for and must not be used in any pharmaceutical/medical applications.

### TYPICAL APPLICATIONS

M80064S is typically used for injection molded cases, crates, trays, industrial pails and other similar items.

### TYPICAL PROPERTY VALUES

Revision 20170519

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</b> <sup>(1)</sup>			
at 190°C and 2.16 kg	8	g/10 min	ASTM D1238
<b>Density at 23°C</b> <sup>(1)</sup>	964	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b> <sup>(2) (3)</sup>			
<b>1% Secant Modulus</b> <sup>(2)</sup>	950	MPa	ASTM D638
<b>Tensile Strength at Yield</b> <sup>(2)</sup>	26	MPa	ASTM D638
<b>Tensile Strength at Break</b> <sup>(2)</sup>	18	MPa	ASTM D638
<b>Tensile Elongation at Break</b> <sup>(2)</sup>	> 800	%	ASTM D638
<b>Flexural Strength</b> <sup>(2)</sup>	25	MPa	ASTM D790
<b>Flexural Modulus</b> <sup>(2)</sup>	1000	MPa	ASTM D790
<b>Izod Impact Strength</b> <sup>(2)</sup>	75	J/m	ASTM D256
<b>Hardness (Shore D)</b> <sup>(2)</sup>	62	-	ASTM D2240
<b>ESCR (100% Igepal), F50</b> <sup>(3)</sup>	3	hrs	ASTM D1693B
<b>ESCR (10% Igepal), F50</b> <sup>(3)</sup>	2	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 M80064S are:

SABIC KSA

Melt temperature: 200 - 250°C

Mold temperature: 15 - 60°C

Injection pressure: 600 - 1000 Bar

SABIC Europe:

Melt temperature: 230 - 275 °C (450 - 525 °F)

Mould temperature: 32 - 38 °C (90 - 100 °F)

Injection pressure: 69 - 89 MPa (10000 - 13000 PSI)

## HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

M80064S 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

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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