



# SABIC<sup>®</sup> HDPE M864E

## HIGH DENSITY POLYETHYLENE

### DESCRIPTION

SABIC<sup>®</sup> HDPE M864E is a 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. SABIC<sup>®</sup> HDPE M864E is available with UV stabilizer as SABIC<sup>®</sup> HDPE M864SE and M864SG.

Typical applications.

Crates & Boxes: SABIC<sup>®</sup> HDPE M864E is typically used for the manufacture of injection molded cases, crates, trays, industrial pails and other similar items.

Caps & Closures: SABIC HDPE<sup>®</sup> M864E is typically used for Juice, Milk and Edible Oil applications.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

### TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</b>			
at 190 °C and 2.16 kg	8	dg/min	ISO 1133
at 190 °C and 5 kg	21.5	dg/min	ISO 1133
<b>Density</b>	964	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile test</b> <sup>(1) (2)</sup>			
stress at yield	32	MPa	ISO 527-2
stress at break	15	MPa	ISO 527-2
strain at break	200	%	ISO 527-2
tensile modulus	1450	MPa	ISO 527-2
<b>Flexural test</b>			
Flexural modulus	1700	MPa	ISO 178
Flexural strength	32	MPa	ISO 178
<b>Izod impact notched</b>			
at 23 °C	4	kJ/m <sup>2</sup>	ISO 180/A
<b>Hardness Shore D</b>	65	-	ISO 868
<b>ESCR on Caps</b> <sup>(3)</sup>	7	h	SABIC method
<b>THERMAL PROPERTIES</b>			
<b>Heat deflection temperature</b>			
at 0.45 MPa (HDT/B)	94	°C	ISO 75-2
<b>Vicat Softening Temperature</b> <sup>(4) (5)</sup>			
at 10 N (VST/A)	129	°C	ISO 306
<b>DSC test</b>			
melting point	134	°C	ISO 11357-3
enthalpy change	226	J/g	ISO 11357-3
<b>C&amp;C PROPERTIES</b>			
<b>Organoleptic properties</b>	approved	-	SABIC method