

# SABIC® HDPE M864EG

High Density Polyethylene

Saudi Basic Industries Corporation (SABIC)

## Message:

SABIC® HDPE M864EG is a high density polyethylene injection moulding grade with a narrow molecular weight distribution. It is typically used for injection moulding applications where rigidity, toughness and warp resistance are required. SABIC® HDPE M864EG is available with UV stabilizer as SABIC® HDPE M864SE and M864SG.

### Typical applications

Crates & Boxes: SABIC® HDPE M864EG is typically used for the manufacture of injection moulded cases, crates, trays, industrial pails and other similar items.

Caps & Closures: SABIC HDPE® M864EG 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.

General Information			
Features	High density		
	Bending resistance		
	Good toughness		
	Narrow molecular weight distribution		
	Medium hardness		
Uses	Industrial application		
	Shield		
	Barrel		
	Shell		
	Loading box		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	0.964	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/2.16 kg	8.0	g/10 min	ISO 1133
190°C/5.0 kg	22	g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (40°C, 1.00mm, 10% Igepal CO-630, compression molding)	7.00	hr	Internal method
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, Compression Molded)	65		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (2.00 mm, Compression Molded)	1450	MPa	ISO 527-2/1BA/50
Tensile Stress			ISO 527-2/1BA/50
Yield, 2.00mm, molded	32.0	MPa	ISO 527-2/1BA/50
Fracture, 2.00mm, molded	15.0	MPa	ISO 527-2/1BA/50

Tensile Strain (Break, 2.00 mm, Compression Molded)	> 200	%	ISO 527-2/1BA/50
Flexural Modulus (2.00 mm, Compression Molded)	1700	MPa	ISO 178
Flexural Stress (2.00 mm, Compression Molded)	32.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, Compression Molded)	4.0	kJ/m <sup>2</sup>	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	94.0	°C	ISO 75-2/B
Vicat Softening Temperature	129	°C	ISO 306/A
Melting Temperature (DSC)	134	°C	ISO 11357-3
Enthalpy Change	226	J/g	ISO 11357-3

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#### Recommended distributors for this material

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