

SABIC® HDPE M80064

HIGH DENSITY POLYETHYLENE

DESCRIPTION

M80064 is a High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give good rigidity, toughness and low warpage.

TYPICAL APPLICATIONS

M80064 is recommended for crates, molded cases and trays, industrial pails and other similar products requiring toughness and rigidity.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	8	g/10 min	ASTM D1238
Density at 23°C ⁽¹⁾	964	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
1% Secant Modulus	950	MPa	ASTM D638
Tensile Strength at Yield	26	MPa	ASTM D638
Tensile Strength at Break	18	MPa	ASTM D638
Tensile Elongation at Break	>800	%	ASTM D638
Flexural Strength ⁽²⁾	42	MPa	ASTM D790
Flexural Modulus	1650	MPa	ASTM D790
Izod Impact Strength	75	J/m	ASTM D256
Hardness (Shore D)	62	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽³⁾	3	Hrs	ASTM D1693B
ESCR (10% Igepal), F50	2	Hrs	ASTM D1693B
THERMAL PROPERTIES			
Vicat Softening Point	125	°C	ASTM D1525
Brittleness Temperature	<-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 M80064 are:

Melt temperature: 200 - 250°C

Mold temperature: 15 - 60°C

Injection pressure: 600 - 1000 Bar