

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

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 ⁽²⁾	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	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 M80064S are:

Melt temperature: 200 - 250°C

Mold temperature: 15 - 60°C

Injection pressure: 600 - 1000 Bar