

SABIC® HDPE M200056

HIGH DENSITY POLYETHYLENE FOR INJECTION MOLDING

DESCRIPTION

M200056 is a High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give good flow properties, low warp age with good dimensional stability and high gloss.

TYPICAL APPLICATIONS

M200056 is recommended for housewares, food containers, toys, caps and closures etc.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	20	g/10 min	ASTM D1238
Density at 23°C ⁽¹⁾	956	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
1% Secant Modulus	800	MPa	ASTM D638
Tensile Strength at Yield	24	MPa	ASTM D638
Tensile Strength at Break	12	MPa	ASTM D638
Tensile Elongation at Break	>200	%	ASTM D638
Flexural Strength	23	MPa	ASTM D790
Flexural Modulus	825	MPa	ISO 178/1A
Izod Impact Strength ⁽²⁾	30	J/m	ASTM D256
Hardness (Shore D)	60	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽³⁾	3	Hrs	ASTM D1693B
ESCR (10% Igepal), F50	2	Hrs	ASTM D1693B
THERMAL PROPERTIES			
Vicat Softening Point	124	°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 M200056 are:

Melt temperature: 180 - 250°C

Mold temperature: 15-60°C

Injection pressure: 600 - 1000 Bar