

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	UNIT S	TEST METHODS
POLYMER PROPERTIES Melt			
Flow Rate 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) (2)(3)}			
1% Secant Modulus (2)	800	MPa	ASTM D638
Tensile Strength at Yield ⁽²⁾	24	MPa	ASTM D638
Tensile Strength at Break ⁽²⁾	12	MPa	ASTM D638
Tensile Elongation at Break (2)	> 200	%	ASTM D638
Flexural Strength ⁽²⁾	23	MPa	ASTM D790
Flexural Modulus ⁽²⁾	825	MPa	ASTM D790
Izod Impact Strength ⁽²⁾	30	J/m	ASTM D256
Hardness (Shore D) ⁽²⁾	60	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽³⁾	3	hrs	ASTM D1693B
ESCR (10% Igepal), F50 (3)	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

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

M200056 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

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

STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties. It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us. Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose. SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.