

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

Revision 20211203

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



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

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.