

SABIC® HDPE M300054

HIGH DENSITY POLYETHYLENE

DESCRIPTION

M300054 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 warpage with good dimensional stability and high gloss.

TYPICAL APPLICATIONS

M300054 is recommended for housewares, small containers, caps, cups & tubs and various thin wall articles.

TYPICAL PROPERTY VALUES

Revision 20170519

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate ⁽¹⁾			
at 190°C and 2.16 kg	30	g/10 min	ASTM D1238
Density at 23°C ⁽¹⁾	954	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
1% Secant Modulus ⁽²⁾	750	MPa	ASTM D638
Tensile Strength at Yield ⁽²⁾	23	MPa	ASTM D638
Tensile Strength at Break ⁽²⁾	12	MPa	ASTM D638
Tensile Elongation at Break ⁽²⁾	200	%	ASTM D638
Flexural Strength ⁽²⁾	22	MPa	ASTM D790
Flexural Modulus ⁽²⁾	800	MPa	ASTM D790
Izod Impact Strength ⁽²⁾	28	J/m	ASTM D256
Hardness (Shore D) ⁽²⁾	60	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽³⁾	< 1	hrs	ASTM D1693B
ESCR (10% Igepal), F50 ⁽³⁾	< 1	hrs	ASTM D1693B
THERMAL PROPERTIES			
Vicat Softening Point	121	°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 M300054 are:

Melt temperature: 175-230°C

Mold temperature: 15-60°C

Injection pressure: 600 - 1000 Bar

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

M300054 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.

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