



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 20220721

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
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	23	MPa	ASTM D638
Tensile Strength at Break	12	MPa	ASTM D638
Tensile Elongation at Break	200	%	ASTM D638
Flexural Strength	22	MPa	ASTM D790
Flexural Modulus	800	MPa	ISO 178/1A
Izod Impact Strength	28	J/m	ASTM D256
Hardness (Shore D)	60	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽³⁾	<1	Hrs	ASTM D1693B
ESCR (10% Igepal), F50	<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

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.