

SABIC® HDPE M200050

HIGH DENSITY POLYETHYLENE

DESCRIPTION

M200050 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

- Cases and boxes for industrial parts.
- Farm produce and beverage crates.
- Pails and buckets.

TYPICAL PROPERTY VALUES

Revision 20250907

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	18.0	g/10 min	ASTM D1238
Density			
Density, (23 °C)	953	g/cm³	ASTM D792
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile test ^{(1) (2)}			
Tensile Strength @ Yield	23.8	MPa	ASTM D638
Tensile Strength @ Break	13.7	MPa	ASTM D638
Tensile Elongation @ Break	182	%	ASTM D638
Flexural Strength	25.6	MPa	ASTM D790
Flexural Modulus	1114	MPa	ASTM D790
THERMAL PROPERTIES			
Melting Temperature			
Melting Temperature	129.1	°C	ASTM D3418
Vicat Softening Temperature ^{(1) (2)}			
Loading 1, Rate A	123.3	°C	ASTM D1525

(1) Typical values; not to be construed as specification limits.

(2) Based on Injection molded specimens

PROCESSING CONDITIONS

Typical processing conditions for M200050 are:

Barrel temperature: 200°C-250°C

Mold temperature: 15-60°C

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.

© 2025 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



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 NON-INFRINGEMENT 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.

