

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

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------------------|--------------|
| POLYMER PROPERTIES⁽¹⁾ | | | |
| Melt Flow Rate (MFR) | | | |
| at 190°C and 2.16 kg | 17 | g/10 min | ASTM D1238 |
| Density | | | |
| Density | 950 | g/cm ³ | ASTM D792 |
| MECHANICAL PROPERTIES⁽¹⁾ | | | |
| Tensile test ^{(1) (2)} | | | |
| Tensile Strength @ Yield | 22 | MPa | ASTM D638 |
| Tensile Strength @ Break | 6 | MPa | ASTM D638 |
| Tensile Elongation @ Break | 120 | % | ASTM D638 |
| Flexural Strength | 20 | MPa | ASTM D790 |
| Flexural Modulus | 620 | MPa | ASTM D790 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature ^{(1) (2)} | | | |
| Vicat softening temperature | 124 | °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