





SABIC® HDPE M40055S

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC HDPE M40055S is a high-density polyethylene especially developed for injection molding application. It has been designed to provide good balance of stiffness, impact at low temperatures and UV stability for outdoors

TYPICAL APPLICATIONS

• Waste bins and shipping containers. • Industrial pails. • Housewares.

| TYPICAL PROPERTY VALUES | | | Revision 20210627 |
|--------------------------------------|----------------|----------|-------------------|
| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
| POLYMER PROPERTIES (1) | | | |
| Melt Flow Rate (MFR) | | | |
| at 190°C and 2.16 kg | 4.0 | g/10 min | ASTM D1238 |
| Density | | | |
| Density | 0.955 | g/cm³ | ASTM D792 |
| Mould shrinkage | | | |
| Molding Shrinkage - Flow (250°C) (2) | 2.6 | % | ASTM D955 |
| MECHANICAL PROPERTIES (1) | 1 | | 1 |
| Tensile test (1) (2) | | | |
| Tensile Strength @ Yield | 25.0 | MPa | ASTM D638 |
| Tensile Strength @ Break | 12 | MPa | ASTM D638 |
| Tensile Elongation @ Break | 720 | % | ASTM D638 |
| Flexural Strength | 22 | MPa | ASTM D790 |
| Flexural Modulus | 710 | MPa | ASTM D790 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature (1) (2) | | | |
| Vicat softening temperature | 128 | °C | ASTM D1525 |

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

PROCESSING CONDITIONS

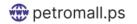
Typical processing conditions for M40055S are:

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.

⁽²⁾ Based on Injection molded specimens







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