

# SABIC® HDPE M80063S

# HIGH DENSITY POLYETHYLENE

### **DESCRIPTION**

SABIC HDPE M80063S is an UV stabilized high density polyethylene resin with very narrow molecular weight distribution. It was developed to impart excellent stiffness, combined with good impact strength to injection molded parts.

# **TYPICAL APPLICATIONS**

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

### TYPICAL PROPERTY VALUES

Revision 20231127

| PROPERTIES                          | TYPICAL VALUES | UNITS    | TEST METHODS |
|-------------------------------------|----------------|----------|--------------|
| POLYMER PROPERTIES (1)              |                |          |              |
| Melt Flow Rate (MFR)                |                |          |              |
| at 190°C and 2.16 kg                | 8.0            | g/10 min | ASTM D1238   |
| Density                             |                |          |              |
| Density                             | 0.964          | g/cm³    | ASTM D792    |
| MECHANICAL PROPERTIES (1)           |                |          |              |
| Tensile test <sup>(1) (2)</sup>     |                |          |              |
| Tensile Strength @ Yield            | 25             | MPa      | ASTM D638    |
| Tensile Strength @ Break            | 27             | MPa      | ASTM D638    |
| Tensile Elongation @ Break          | 426            | %        | ASTM D638    |
| Flexural Modulus                    | 864            | MPa      | ASTM D790    |
| Izod Impact, notched, 23°C          | 84             | J/m      | ASTM D256    |
| Hardness Shore D                    | 53             | -        | ASTM D2240   |
| ESCR (3)                            | 2              | Hrs      | ASTM D1693   |
| THERMAL PROPERTIES                  |                |          |              |
| Vicat Softening Temperature (1) (2) |                |          |              |
| Vicat softening temperature         | 128            | °C       | ASTM D1525   |

<sup>(1)</sup> Typical values: not to be construed as specification limits.

# **PROCESSING CONDITIONS**

Typical processing conditions for M80063S are:

Barrel temperature: 200°C-250°C Mold temperature: 15-60°C

<sup>(2)</sup> Based on Injection molded specimens

<sup>(3)</sup> Based on compression molded sheet



### 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**

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