

# SABIC® PP 56M10

## PP IMPACT COPOLYMER

### DESCRIPTION

SABIC® PP 56M10 has high impact resistance, even at low temperatures, and high stiffness. It is typically used in a variety of applications e.g. containers and crates & boxes. It is also used in automotive components, like for example battery cases.

Health, Safety and Food Contact regulations: Material Safety Data Sheets (MSDS) and Product Safety declarations are available on our Internet site <http://www.SABIC.com>

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

This grade material is UL registered under File E111275 ([www.ul.com](http://www.ul.com)). IMDS 80775790

### TYPICAL PROPERTY VALUES

Revision 20240121

| PROPERTIES                                        | TYPICAL VALUES | UNITS  | TEST METHODS |
|---------------------------------------------------|----------------|--------|--------------|
| <b>POLYMER PROPERTIES</b>                         |                |        |              |
| <b>Melt Flow Rate (MFR)</b>                       |                |        |              |
| at 230 °C and 2.16 kg                             | 6.2            | dg/min | ISO 1133     |
| <b>Density</b>                                    | 905            | kg/m³  | ASTM D1505   |
| <b>FORMULATION</b>                                |                |        |              |
| <b>Anti static agent</b>                          | □              | -      | -            |
| <b>Nucleating agent</b>                           | □              | -      | -            |
| <b>MECHANICAL PROPERTIES</b>                      |                |        |              |
| <b>Tensile test</b>                               |                |        |              |
| strain at yield                                   | 5              | %      | ISO 527-2 1A |
| tensile modulus <sup>(1)</sup>                    | 1400           | MPa    | ISO 527-2 1A |
| stress at yield <sup>(2)</sup>                    | 27             | MPa    | ISO 527-2 1A |
| <b>Izod impact notched</b>                        |                |        |              |
| at -20 °C                                         | 5              | kJ/m²  | ISO 180/1A   |
| at 23 °C                                          | 11             | kJ/m²  | ISO 180/1A   |
| at 0 °C                                           | 7              | kJ/m²  | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b>             |                |        |              |
| at 0 °C                                           | 8              | kJ/m²  | ISO 179/1eA  |
| at 23 °C                                          | 12.5           | kJ/m²  | ISO 179/1eA  |
| at -20 °C                                         | 6              | kJ/m²  | ISO 179/1eA  |
| <b>Hardness Shore D</b>                           | 65             | -      | ISO 868      |
| <b>THERMAL PROPERTIES</b>                         |                |        |              |
| <b>Heat deflection temperature <sup>(3)</sup></b> |                |        |              |
| at 0.45 MPa (HDT/B)                               | 85             | °C     | ISO 75       |
| at 1.80 MPa (HDT/A)                               | 55             | °C     | ISO 75       |
| <b>Vicat Softening Temperature <sup>(4)</sup></b> |                |        |              |
| at 50 N (VST/B)                                   | 78             | °C     | ISO 306      |
| at 10 N (VST/A)                                   | 152            | °C     | ISO 306      |

- (1) Speed of testing: 1 mm/min
- (2) Speed of testing: 50 mm/min
- (3) Flat wise ( testbar 80\*10\*4mm)
- (4) Temperature rate: 120°C/h

## STORAGE AND HANDLING

Avoid prolonged storage in open sunlight, high temperatures (<50 °C) and /or high humidity as this could well speed up alteration and consequently loss of quality of the material and /or its packaging. Keep material completely dry for good processing.

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