

# SABIC® PP 512MN10

## PP IMPACT COPOLYMER

### DESCRIPTION

This grade has excellent flow properties and a good combination of high impact strength and stiffness. It is widely used in articles where good processability, high toughness and a low warpage are required, e.g. vacuum-cleaner housings, large size flower pots, foodstuff containers and ice-cream containers. 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 20170531

| PROPERTIES  | TYPICAL VALUES           | UNITS             | TEST METHODS |
|---|--------------------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                         |                          |                   |              |
| <b>Melt Flow Rate</b>                             |                          |                   |              |
| at 230 °C and 2.16 kg                             | 37                       | dg/min            | ISO 1133     |
| <b>Density</b>                                    | 905                      | kg/m <sup>3</sup> | ISO 1183     |
| <b>FORMULATION</b>                                |                          |                   |              |
| <b>Anti static agent</b>                          | <input type="checkbox"/> | -                 | -            |
| <b>Nucleating agent</b>                           | <input type="checkbox"/> | -                 | -            |
| <b>MECHANICAL PROPERTIES</b>                      |                          |                   |              |
| <b>Tensile test</b>                               |                          |                   |              |
| tensile modulus <sup>(1)</sup>                    | 1300                     | MPa               | ISO 527-2 1A |
| stress at yield <sup>(2)</sup>                    | 25                       | MPa               | ISO 527-2 1A |
| <b>Tensile test</b>                               |                          |                   |              |
| strain at yield <sup>(2)</sup>                    | 5                        | %                 | ISO 527-2 1A |
| <b>Izod impact notched</b>                        |                          |                   |              |
| at 23 °C  | 8                        | kJ/m <sup>2</sup> | ISO 180/1A   |
| at 0 °C   | 6.5                      | kJ/m <sup>2</sup> | ISO 180/1A   |
| at -20 °C   | 5                        | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b>             |                          |                   |              |
| at 0 °C   | 7                        | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at -20 °C   | 5                        | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at 23 °C  | 11                       | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>Hardness Shore D</b>                           | 63                       | -                 | ISO 868      |
| <b>THERMAL PROPERTIES</b>                         |                          |                   |              |
| <b>Heat Deflection Temperature <sup>(3)</sup></b> |                          |                   |              |
| at 0.45 MPa (HDT/B)                               | 85                       | °C                | ISO 75       |

| PROPERTIES  | TYPICAL VALUES | UNITS | TEST METHODS |
|---|----------------|-------|--------------|
| at 1.80 MPa (HDT/A)                               | 55             | °C    | ISO 75       |
| <b>Vicat Softening Temperature <sup>(4)</sup></b> |                |       |              |
| at 50 N (VST/B)                                   | 75             | °C    | ISO 306      |
| at 10 N (VST/A)                                   | 150            | °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

## DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.