

# SABIC® PP 108MF97

PP SUPER HIGH IMPACT

## DESCRIPTION

SABIC® PP 108MF97 is a super high impact copolymer which exhibits an unmatched cold impact resistance, high flow and excellent paint adhesion characteristics. It is very resistant to UV. Because of this unique and well balanced property profile our customers commonly use this material for partially and non-painted car bumpers.

SABIC® PP 108MF97 is a designated automotive grade.

IMDS ID: 80775790

## TYPICAL PROPERTY VALUES

Revision 20180807

| PROPERTIES  | TYPICAL VALUES                      | UNITS             | TEST METHODS |
|---|-------------------------------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                         |                                     |                   |              |
| <b>Melt Flow Rate (MFR)</b>                       |                                     |                   |              |
| at 230 °C and 2.16 kg                             | 10                                  | dg/min            | ISO 1133     |
| <b>Density</b>                                    | 905                                 | kg/m <sup>3</sup> | ISO 1183     |
| <b>Mould shrinkage</b>                            |                                     |                   |              |
| 24 hours after injection moulding <sup>(1)</sup>  | 1.5                                 | %                 | SABIC method |
| <b>FORMULATION</b>                                |                                     |                   |              |
| <b>UV stabilized</b>                              | <input checked="" type="checkbox"/> | -                 | -            |
| <b>Anti static agent</b>                          | <input type="checkbox"/>            | -                 | -            |
| <b>Nucleating agent</b>                           | <input checked="" type="checkbox"/> | -                 | -            |
| <b>MECHANICAL PROPERTIES</b>                      |                                     |                   |              |
| <b>Tensile test</b>                               |                                     |                   |              |
| stress at yield <sup>(2)</sup>                    | 19                                  | MPa               | ISO 527-2 1A |
| strain at yield                                   | 8                                   | %                 | ISO 527-2 1A |
| tensile modulus <sup>(3)</sup>                    | 1000                                | MPa               | ISO 527-2 1A |
| <b>Izod impact notched</b>                        |                                     |                   |              |
| at -20 °C   | 35                                  | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Izod impact notched</b>                        |                                     |                   |              |
| at 23 °C  | No Break                            | kJ/m <sup>2</sup> | ISO 180/1A   |
| at 0 °C   | No Break                            | kJ/m <sup>2</sup> | ISO 180/1A   |
| at -20 °C   | 35                                  | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b>             |                                     |                   |              |
| at 23 °C  | No Break                            | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at 0 °C   | No Break                            | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>Charpy impact unnotched</b>                    |                                     |                   |              |
| at 23 °C  | No Break                            | kJ/m <sup>2</sup> | ISO 179/1eU  |
| <b>Hardness Shore D</b>                           | 52                                  | -                 | ISO 868      |
| <b>THERMAL PROPERTIES</b>                         |                                     |                   |              |
| <b>Vicat Softening Temperature <sup>(4)</sup></b> |                                     |                   |              |
| at 10 N (VST/A)                                   | 130                                 | °C                | ISO 306      |
| at 50 N (VST/B)                                   | 50                                  | °C                | ISO 306      |

- (1) All measurements on injection molded samples.
- (2) Speed of testing: 50 mm/min
- (3) Speed of testing: 1 mm/min
- (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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