

SABIC® PP 86MF97

PP SUPER HIGH IMPACT

DESCRIPTION

SABIC® PP 86MF97 is a grade which is characterised by an optimum combination of stiffness, impact resistance and flow. It is highly UV-stabilised, and therefore commonly used for exterior applications such as car bumpers.

SABIC® PP 86MF97 is a designated automotive grade.

IMDS ID: 80775790

TYPICAL PROPERTY VALUES

Revision 20180807

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|-------------------------------------|--------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) | | | |
| at 230 °C and 2.16 kg | 4.6 | dg/min | ISO 1133 |
| Density | 905 | kg/m³ | ASTM D1505 |
| Mould shrinkage ⁽¹⁾ | | | |
| 24 hours after injection moulding | 1.6 | % | SABIC method |
| FORMULATION | | | |
| UV stabilized | <input checked="" type="checkbox"/> | - | - |
| Anti static agent | <input type="checkbox"/> | - | - |
| Nucleating agent | <input type="checkbox"/> | - | - |
| MECHANICAL PROPERTIES | | | |
| Tensile test | | | |
| stress at yield | 22 | MPa | ISO 527-2 1A |
| strain at yield ⁽²⁾ | 6 | % | ISO 527-2 1A |
| tensile modulus ⁽³⁾ | 1000 | MPa | ISO 527-2 1A |
| Izod impact notched | | | |
| at 23 °C | No Break | kJ/m² | ISO 180/1A |
| at 0 °C | 30 | kJ/m² | ISO 180/1A |
| at -20 °C | 8 | kJ/m² | ISO 180/1A |
| Charpy Impact Strength Notched | | | |
| at 23 °C | No Break | kJ/m² | ISO 179/1eA |
| at 23 °C | No Break | kJ/m² | ISO 179/1eA |
| Charpy impact unnotched | | | |
| at 23 °C | No Break | kJ/m² | ISO 179/1eU |
| Hardness Shore D | 60 | - | ISO 868 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature ⁽⁴⁾ | | | |
| at 10 N (VST/A) | 143 | °C | ISO 306 |
| at 50 N (VST/B) | 62 | °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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