

SABIC® PP 57MNK10

POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING

DESCRIPTION

SABIC® PP 57MNK10 is a controlled rheology PP grade and specially developed for producing injection molded articles. This grade has excellent impact resistance (even at low temperature) and balanced stiffness.

TYPICAL APPLICATIONS

SABIC® PP 57MNK10 can be used for furniture, housewares, pails abd containers, toys, crates and boxes.

TYPICAL PROPERTY VALUES

Revision 20201214

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--------------------------------|----------------|----------|--------------|
| POLYMER PROPERTIES (1) | | | |
| Melt Flow Rate (MFR) | | | |
| at 230°C and 2.16kg | 12 | g/10 min | ASTM D1238 |
| Density | | | |
| at 23°C | 905 | kg/m³ | ASTM D792 |
| MECHANICAL PROPERTIES (2) | | | |
| Tensile Properties | | | |
| Strength @ Yield | 24 | MPa | ASTM D638 |
| Elongation @ Yield | 4 | % | ASTM D638 |
| Flexural Modulus (1% Secant) | 1150 | MPa | ASTM D790 A |
| Izod Impact Strength | | | |
| notched, at 23°C | 115 | J/m | ASTM D256 |
| notched, at -20°C | 63 | J/m | ASTM D256 |
| Rockwell Hardness, R-Scale (1) | 80 | - | ASTM D785 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature | 148 | °C | ASTM D1525 |
| Heat deflection temperature | | | |
| at 455kPa | 90 | °C | ASTM D648 |

⁽¹⁾ Typical values, not to be construed as specific limits

PROCESSING CONDITIONS

Typical processing conditions for 57MNK10 are:

Barrel temperature range: 200 - 250°C.

Mold shrinkage: 1.2 - 2.0% depending on wall thickness and processing conditions.

Mold temperature: normally 15 - 40°C, up to 65°C for thick parts.

STORAGE AND HANDLING

Polypropylene resin 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 do not 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 PP resin within 6 months after delivery.

⁽²⁾ Based on injection molded specimens



DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.