

# SABIC<sup>®</sup> PP 57MNK10

POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING

## DESCRIPTION

SABIC<sup>®</sup> 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<sup>®</sup> PP 57MNK10 can be used for furniture, housewares, pails and containers, toys, crates and boxes.

## TYPICAL PROPERTY VALUES

Revision 20181012

| PROPERTIES                                       | TYPICAL VALUES | UNITS             | TEST METHODS |
|--|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                        |                |                   |              |
| <b>Melt Flow Rate</b>                            |                |                   |              |
| at 230°C and 2.16kg                              | 12             | g/10 min          | ASTM D1238   |
| <b>Density</b>                                   |                |                   |              |
| at 23°C  | 905            | kg/m <sup>3</sup> | ASTM D792    |
| <b>MECHANICAL PROPERTIES</b>                     |                |                   |              |
| <b>Flexural Modulus (1% Secant)</b>              |                |                   |              |
|  | 1150           | MPa               | ASTM D790 A  |
| <b>Izod Impact Strength</b>                      |                |                   |              |
| notched, at 23°C                                 | 115            | J/m               | ASTM D256    |
| notched, at -20°C                                | 63             | J/m               | ASTM D256    |
| <b>Rockwell Hardness, R-Scale <sup>(1)</sup></b> |                |                   |              |
|  | 80             | -                 | ASTM D785    |
| <b>FILM PROPERTIES</b>                           |                |                   |              |
| <b>Tensile Properties</b>                        |                |                   |              |
| stress at yield                                  | 24             | MPa               | ASTM D638    |
| strain at yield                                  | 4              | %                 | ASTM D638    |
| <b>THERMAL PROPERTIES</b>                        |                |                   |              |
| <b>Vicat Softening Temperature</b>               |                |                   |              |
|  | 148            | °C                | ASTM D1525   |
| <b>Heat deflection temperature</b>               |                |                   |              |
| at 455kPa  | 90             | °C                | ASTM D648    |

(1) Based on injection molded specimens

## 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.



## 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>. For additional specific information please contact SABIC local representative.

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical / medical applications.

## 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.

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