



# 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

| PROPERTIES                                       | TYPICAL VALUES | UNITS             | TEST METHODS |
|--|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES <sup>(1)</sup></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>Tensile Properties</b>                        |                |                   |              |
| Strength @ Yield                                 | 24             | MPa               | ASTM D 638   |
| Elongation @ Yield                               | 4              | %                 | ASTM D 638   |
| <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>THERMAL PROPERTIES</b>                        |                |                   |              |
| <b>Vicat Softening Temperature</b>               | 148            | °C                | ASTM D1525   |
| <b>Heat deflection temperature</b>               |                |                   |              |
| 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.