

Revision 20201211

# SABIC® PP 413MNK45

POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING

## **DESCRIPTION**

SABIC® PP 413MNK45 is a controlled rheology PP grade with a very high fluidity. It is provided with an antistatic and nucleating agent package. This grade has a good impact – stiffness balance.

## **TYPICAL APPLICATIONS**

SABIC® PP 413MNK45 can be used for housewares and thin-walled packaging containers (e.g. margarine tubs, yoghurt pots, ice cream containers, etc.).

## TYPICAL PROPERTY VALUES

PROPERTIES TYPICAL VALUES UNITS **TEST METHODS** POLYMER PROPERTIES (1) Melt Flow Rate (MFR) at 230°C and 2.16kg g/10 min ASTM D1238 70 Density ASTM D638 at 23°C 905 kg/m<sup>3</sup> MECHANICAL PROPERTIES (2) **Tensile Properties** ASTM D638 Strength @ Yield 28 MPa Elongation @ Yield 5 % ASTM D638 Flexural Modulus (1% Secant) ASTM D790 A 1550 MPa Izod Impact Strength notched, at 23°C 65 J/m ASTM D256 notched, at -20°C 35 ASTM D256 J/m Rockwell Hardness, R-Scale 94 ASTM D785 THERMAL PROPERTIES Vicat Softening Temperature 150 °C ASTM D1525 Heat deflection temperature °C ASTM D648 455kPa 95

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

(2) Based on injection molded specimens

## **PROCESSING CONDITIONS**

Typical processing conditions for 413MNK45 are:

Barrel temperature range: 200 - 245°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.

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