

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

Revision 20220720

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

(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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