

# SABIC® PP 49MK45

POLYPROPYLENE IMPACT COPOLYMER  
FOR INJECTION MOLDING

## DESCRIPTION

SABIC® PP 49MK45 is specially developed for producing injection molded articles. This grade contains nucleating & antistatic agents. It has medium flow properties and excellent impact - stiffness balance.

## TYPICAL APPLICATIONS

SABIC® PP 49MK45 can be used for housewares, furniture, toys, appliances, pails & containers.

## TYPICAL PROPERTY VALUES

Revision 20170425

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate <sup>(1)</sup></b>			
@ 230°C & 2.16kg load <sup>(1)</sup>	21	g/10 min	ASTM D 1238
<b>Density at 23°C <sup>(1)</sup></b>	905	kg/m <sup>3</sup>	ASTM D792
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile Strength at Yield <sup>(2)</sup></b>	29	MPa	ASTM D638
<b>Tensile Elongation at Yield <sup>(2)</sup></b>	5	%	ASTM D638
<b>Flexural Modulus (1% Secant) <sup>(2)</sup></b>	1400	MPa	ASTM D790 A
<b>Flexural Modulus (1% Secant) <sup>(2)</sup></b>	1600	MPa	ASTM D790 B
<b>Notched Izod Impact Strength at 23°C <sup>(2)</sup></b>	65	J/m	ASTM D256
<b>Notched Izod Impact Strength at -20°C <sup>(2)</sup></b>	35	J/m	ASTM D256
<b>Rockwell Hardness, R-Scale <sup>(2)</sup></b>	95	-	ASTM D785
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Point</b>	150	°C	ASTM D1525
<b>Heat Deflection Temperature at 455kPa</b>	106	°C	ASTM D648

(1) Typical values; not to be construed as specification limits.

(2) Based on injection molded specimens

## PROCESSING CONDITIONS

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

SABIC® PP 49MK45 is suitable for food contact application. Detailed information is provided in relevant documents / certificates and 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.

## DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.