

SABIC® PP 412MK49

POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING

DESCRIPTION

SABIC® PP 412MK49 is specially developed for producing injection molded articles. This grade contains nucleating and antistatic agents. It has high flow properties and excellent impact – stiffness balance.

TYPICAL APPLICATIONS

SABIC® PP 412MK49 can be used for housewares, toys, appliances and thin-walled containers (food and non-food).

TYPICAL PROPERTY VALUES

Revision 20170531

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230°C and 2.16kg	45	g/10 min	ASTM D1238
Density			
at 23°C	905	kg/m ³	ASTM D792
MECHANICAL PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at yield	28	MPa	ASTM D638
strain at yield	4	%	ASTM D638
Flexural Modulus (1% Secant) ⁽¹⁾	1450	MPa	ASTM D790 A
Flexural Modulus (1% Secant) ⁽¹⁾	1650	MPa	ASTM D790 B
Izod Impact Strength ⁽¹⁾			
notched, at 23°C	55	J/m	ASTM D256
notched, at -20°C	33	J/m	ASTM D256
Rockwell Hardness, R-Scale ⁽¹⁾	100	-	ASTM D785
THERMAL PROPERTIES			
Vicat Softening Temperature	150	°C	ASTM D1525
Heat Deflection Temperature			
at 455kPa	112	°C	ASTM D648

(1) Based on injection molded specimens

PROCESSING CONDITIONS

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.

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

SABIC® PP 412MK49 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.