

PRODUCT NAME: PP 412MK45
POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING
Supplier: SABIC®
Product Identification & 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).

Physical Properties

Property	Typical Values	Units	Test Methods
Melt Flow Rate (MFR) @ 230 °C / 2.16 kg	45	g/10 min	ASTM D1238
Density at 23 °C	905	kg/m ³	ASTM D1505

Mechanical Properties

Property	Typical Values	Units	Test Methods
Tensile Strength @ Yield	28	MPa	ASTM D638
Elongation @ Yield	4	%	ASTM D638
Flexural Modulus (1% Secant)	1450	MPa	ASTM D790 (Procedure A)
Izod Impact Strength, Notched @ 23 °C	55	J/m	ASTM D256
Izod Impact Strength, Notched @ -20 °C	33	J/m	ASTM D256
Rockwell Hardness, R-Scale	100	R	ASTM D785

Thermal Properties

Property	Typical Values	Units	Test Methods
Vicat Softening Point	150	°C	ASTM D1525
Heat Deflection Temperature @ 455 kPa	112	°C	ASTM D648

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.

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.

Revision: This datasheet replaces all previous versions. **Revision Date:** Mar 2026

