



Revision 20181012

# SABIC<sup>®</sup> PP 512MK46

# POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING

## DESCRIPTION

SABIC<sup>®</sup> PP 512MK46 is specially developed for producing injection molded articles. This grade contains nucleating and antistatic agents. It has high flow properties in combination with excellent impact / stiffness balance and excellent organoleptic properties. SABIC<sup>®</sup> PP 512MK46 encompasses the following features: High top load strength & down gauging potential; Very good impact resistance; Excellent isotropic shrinkage performance (dimensional stability); High crystallization temperature and excellent flow behavior (lower cycle time); Clean product in combination of low / no odor & taste.

## **TYPICAL APPLICATIONS**

SABIC® PP 512MK46 typically used in thin-walled packaging applications for both food and non-food industries; this includes packaging for frozen / chilled / ambient food, dairy products (e.g. butter, yoghurt, cream, cheese etc.). It can be also used in several applications in the housewares, appliances, toys, caps & closures and compounding.

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230°C and 2.16kg	50	g/10 min	ASTM D1238
Density			
at 23°C	903	kg/m <sup>3</sup>	ASTM D792
MECHANICAL PROPERTIES (1)			
Tensile Strength at Yield	27	MPa	ASTM D638
Tensile Elongation at Yield	5	%	ASTM D638
Flexural Modulus (1% Secant)	1330	MPa	ASTM D790 A
Izod Impact Strength			
notched, at 23°C	59	J/m	ASTM D256
notched, at -20°C	38	J/m	ASTM D256
Rockwell Hardness, R-Scale <sup>(1)</sup>	98	-	ASTM D785
THERMAL PROPERTIES			
Vicat Softening Temperature	149	°C	ASTM D1525
Heat deflection temperature			
at 455kPa	110	°C	ASTM D648

(1) Based on injection molded specimens.

#### **PROCESSING CONDITIONS**

Typical processing conditions for 512MK46 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.





## HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

SABIC® PP 512MK46 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.

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