

SABIC® PP 511MK46

POLYPROPYLENE IMPACT COPOLYMER FOR INJECTION MOLDING

DESCRIPTION

SABIC® PP 511MK46 is specially developed for producing injection molded articles. This grade contains nucleating & antistatic agents. It has medium-high flow properties in combination with excellent impact / stiffness balance and excellent organoleptic properties.

SABIC® PP 511MK46 encompasses the following features: excellent top load strength & down gauging potential; excellent 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 511MK46 can be used for appliances, housewares, pails & containers and thin wall containers.

TYPICAL PROPERTY VALUES

Revision 20230511

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230°C and 2.16kg	30	g/10 min	ASTM D1238
Density			
at 23°C	903	kg/m ³	ASTM D792
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile Strength at Yield	26	MPa	ASTM D638
Tensile Elongation at Yield	5	%	ASTM D638
Flexural Modulus (1% Secant)	1160	MPa	ASTM D790 A
Flexural Modulus (1% Secant)	1310	MPa	ASTM D790 B
Izod Impact Strength			
notched, at 23°C	90	J/m	ASTM D256
notched, at -20°C	50	J/m	ASTM D256
Rockwell Hardness, R-Scale	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

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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