



SABIC® PP 46MNK45

PP IMPACT COPOLYMER

DESCRIPTION

SABIC® 46MNK45 is a phthalate free polypropylene impact copolymer grade suitable for both injection and compression molding of beverage closures. The main features of this grade are very good processability, good stiffness and impact resistance. This is a nucleated grade with slip and antistatic agent.

TYPICAL APPLICATIONS

SABIC® 46MNK45 can be used for production of beverage closures, housewares and industrial packaging etc.

TYPICAL PROPERTY VALUES

Revision 20230421

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Modulus, 50 mm/min	1500	MPa	ASTM D638
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
@ 230°C & 2.16 kg load	6	g/10 min	ASTM D1238
Density			
@ 23°C	905	kg/m³	ASTM D792
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile strength			
@ Yield	30	MPa	ASTM D638
Tensile Elongation			
@ Yield	7	%	ASTM D638
Flexural Modulus			
(1% Secant)	1400	MPa	ASTM D790 A
Notched Izod Impact Strength at 23°C	80	J/m	ASTM D256
Notched Izod Impact Strength at -20°C	27	J/m	ASTM D256
Rockwell Hardness, R-Scale	80	-	ASTM D785
THERMAL PROPERTIES			
Vicat Softening Point	149	°C	ASTM D1525
Heat deflection temperature			
@ 455 kPa	110	°C	ASTM D648

(1) Based on injection molded specimens

PROCESSING CONDITIONS

Typical processing conditions for SABIC® 46MNK45 are 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.



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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