



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.

NOTICE: The information and data contained herein are believed to be correct and given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of product, no warranty is given or is to be implied with respect to such information, nor do we offer any immunity against infringement.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.