

# SABIC® PP 500P

POLYPROPYLENE HOMOPOLYMER

## DESCRIPTION

SABIC® PP 500P is a medium flow, multipurpose grade for extrusion and injection molding applications.

## TYPICAL APPLICATIONS

If applied for extrusion 500P shows an excellent stretch ability and is therefore suitable for tapes and strapping, high tenacity yarns and carpet backing. It can also be used in ropes and twines, woven bags, flexible intermediate bulk containers, geotextiles and concrete reinforcements.

For thermoforming it shows a unique balance between transparency, impact resistance and thickness uniformity.

500P is also suitable for production of injection molded articles e.g. caps and closures and house ware products, where this grade shows a high stiffness, combined with a fair impact resistance and very good surface hardness.

## TYPICAL PROPERTY VALUES

Revision 20230123

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
at 230 °C and 2.16 kg	3	dg/min	ISO 1133
<b>Density</b>	905	kg/m <sup>3</sup>	ASTM D1505
<b>Molecular Weight Distribution</b>	Broad	-	-
<b>Isotacticity</b>	Medium	-	-
<b>FORMULATION</b>			
<b>Anti static agent</b>	<input type="checkbox"/>	-	-
<b>Nucleating agent</b>	<input type="checkbox"/>	-	-
<b>Gas fading stabilized</b>	<input type="checkbox"/>	-	SABIC method
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile test</b>			
tensile modulus <sup>(1)</sup>	1550	MPa	ISO 527-2 1A
strain at yield	10	%	ISO 527-2 1A
stress at yield <sup>(2)</sup>	37	MPa	ISO 527-2 1A
<b>Izod impact notched</b>			
at 23 °C	3.5	kJ/m <sup>2</sup>	ISO 180/1A
<b>Charpy Impact Strength Notched</b>			
at 23 °C	4.5	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
<b>Heat deflection temperature</b>			
at 0.45 MPa (HDT/B)	85	°C	ISO 75
at 1.80 MPa (HDT/A)	55	°C	ISO 75
<b>Vicat Softening Temperature <sup>(3)</sup></b>			
at 10 N (VST/A)	152	°C	ISO 306
at 50 N (VST/B)	88	°C	ISO 306

- (1) Speed of testing: 1 mm/min
- (2) Speed of testing: 50 mm/min
- (3) Temperature rate: 120°C/h

## PROCESSING CONDITIONS

Typical processing conditions for 500P are:

Barrel temperature range: 235 - 250°C

## 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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