





POLYPROPYLENE HOMOPOLYMER

# DESCRIPTION

SABIC<sup>®</sup> 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 20181012

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
at 230 °C and 2.16 kg	3.1	dg/min	ISO 1133
Density	905	kg/m <sup>3</sup>	ASTM D1505
Molecular Weight Distribution	Broad	-	-
Isotacticity	Medium	-	
FORMULATION			
Anti static agent		-	-
Nucleating agent		-	-
Gas fading stabilized		-	SABIC method
MECHANICAL PROPERTIES			
Tensile test			
tensile modulus <sup>(1)</sup>	1550	MPa	ISO 527-2 1A
strain at yield	1550 10	MPa %	ISO 527-2 1A ISO 527-2 1A
strain at yield	10	%	ISO 527-2 1A
strain at yield <sup>(2)</sup>	10	%	ISO 527-2 1A
strain at yield stress at yield <sup>(2)</sup> Izod impact notched	10 37	% MPa	ISO 527-2 1A ISO 527-2 1A
strain at yield stress at yield <sup>(2)</sup> Izod impact notched at 23 °C	10 37	% MPa	ISO 527-2 1A ISO 527-2 1A
strain at yield stress at yield <sup>(2)</sup> Izod impact notched at 23 °C Charpy Impact Strength Notched	10 37 3.5	% MPa kJ/m²	ISO 527-2 1A ISO 527-2 1A ISO 180/1A
strain at yield stress at yield <sup>(2)</sup> <b>Izod impact notched</b> at 23 °C <b>Charpy Impact Strength Notched</b> at 23 °C	10 37 3.5	% MPa kJ/m²	ISO 527-2 1A ISO 527-2 1A ISO 180/1A
strain at yield stress at yield <sup>(2)</sup> Izod impact notched at 23 °C Charpy Impact Strength Notched at 23 °C THERMAL PROPERTIES	10 37 3.5	% MPa kJ/m²	ISO 527-2 1A ISO 527-2 1A ISO 180/1A
strain at yield stress at yield <sup>(2)</sup> Izod impact notched at 23 °C Charpy Impact Strength Notched at 23 °C THERMAL PROPERTIES Heat deflection temperature	10 37 3.5 4.5	% MPa kJ/m² kJ/m²	ISO 527-2 1A ISO 527-2 1A ISO 180/1A ISO 179/1eA
strain at yield stress at yield <sup>(2)</sup> <b>Izod impact notched</b> at 23 °C <b>Charpy Impact Strength Notched</b> at 23 °C <b>THERMAL PROPERTIES</b> <b>Heat deflection temperature</b> at 0.45 MPa (HDT/B)	10 37 3.5 4.5 85	% MPa kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 527-2 1A ISO 527-2 1A ISO 180/1A ISO 180/1A ISO 179/1eA
strain at yield stress at yield <sup>(2)</sup> <b>Izod impact notched</b> at 23 °C <b>Charpy Impact Strength Notched</b> at 23 °C <b>THERMAL PROPERTIES</b> <b>Heat deflection temperature</b> at 0.45 MPa (HDT/B) at 1.80 MPa (HDT/A)	10 37 3.5 4.5 85	% MPa kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 527-2 1A ISO 527-2 1A ISO 180/1A ISO 180/1A ISO 179/1eA





(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

#### HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Material Safety Data Sheets (MSDS) and Product Safety declarations are available on our Internet site http://www.SABIC.com. For additional specific information please contact SABIC local representative.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

This grade material is UL registered under File E111275 (www.ul.com).

### QUALITY

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO9001.

### 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.

#### DISCLAIMER

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