

Revision 20220720

# SABIC® PP 500P

## POLYPROPYLENE HOMOPOLYMER REGION ASIA

### 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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230°C and 2.16kg	3	g/10 min	ASTM D1238
Density			
at 23°C	905	kg/m <sup>3</sup>	ASTM D638
MECHANICAL PROPERTIES			
Flexural Modulus (1% Secant)	1500	MPa	ASTM D790 A
Izod Impact Strength			
notched, at 23°C	25	J/m	ASTM D256
Rockwell Hardness, R-Scale	102	-	ASTM D785
FILM PROPERTIES			
Tensile Properties <sup>(1)</sup>			
stress at yield	35	MPa	ASTM D638
strain at yield	10	%	ASTM D638
THERMAL PROPERTIES			
Vicat Softening Temperature	152	°C	ASTM D1525
Heat deflection temperature <sup>(2)</sup>			
at 455kPa	100	°C	ASTM D648

(1) Based on injection molded specimens.

(2) Flat wise (testbar 80\*10\*4mm)

### **PROCESSING CONDITIONS**

Typical processing conditions for 500P are: Barrel temperature range: 235 - 250°C