

SABIC® PP 521P

POLYPROPYLENE HOMOPOLYMER

DESCRIPTION

SABIC® PP 521P is particularly designed for (biaxially) oriented PP film extrusion with a very specific molecular structure providing the ultimate properties required for the stretching process.

TYPICAL APPLICATIONS

SABIC® PP 521P is typically used in mono layer or coextruded (B)OPP film. SABIC®PP 521P is known for its excellent n=metallisation behaviour. It can also be used as base material for plain film for stationary, dry food bags, synthetic paper and heat sealable packaging films.

TYPICAL PROPERTY VALUES

Revision 20210507

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	3	dg/min	ISO 1133
Density	905	kg/m³	ASTM D1505
Molecular Weight Distribution	Broad	-	-
Isotacticity	Medium	-	-
FORMULATION			
Anti block agent	☐	-	-
Slip agent	☐	-	-
Anti static agent	☐	-	-
Nucleating agent	☐	-	-
Gas fading stabilized	☐	-	SABIC method
MECHANICAL PROPERTIES			
Tensile test			
strain at break	600	%	ISO 527
stress at break	34	MPa	ISO 527
stress at yield ⁽¹⁾	36	MPa	ISO 527-2 1A
tensile modulus ⁽²⁾	1550	MPa	ISO 527-2 1A
strain at yield	10	%	ISO 527-2 1A
Flexural test			
Flexural modulus	1500	MPa	ASTM D790
THERMAL PROPERTIES			
Vicat Softening Temperature ⁽³⁾			
at 10 N (VST/A)	155	°C	ISO 306/A
at 50 N (VST/B)	88	°C	ISO 306

(1) Speed of testing: 50 mm/min

(2) Speed of testing: 1 mm/min

(3) Temperature rate: 120°C/h

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CHEMISTRY THAT MATTERS™



PROCESSING CONDITIONS

Typical processing conditions for 521P are:

Average extrusion temperature range may be kept at 245 - 255°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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