



SABIC® PP 5001P

POLYPROPYLENE HOMOPOLYMER

DESCRIPTION

SABIC® PP 5001P is a polypropylene homopolymer resin for yarn extrusion. The yarn made from this resin exhibits excellent mechanical properties & low water carryover.

TYPICAL APPLICATIONS

SABIC® PP 5001P can be used to produce woven sacks, woven fabric, monofilament, box strap, rope & straw. This product is not intended for use in medical and pharmaceutical applications.

TYPICAL PROPERTY VALUES

Revision 20230421

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|----------------|-------------------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) | | | |
| @ 230°C/2.16 kg | 3 | g/10 min | ASTM D1238 |
| Density | 905 | kg/m ³ | ASTM D1505 |
| MECHANICAL PROPERTIES ^{(1) (2)} | | | |
| Tensile Strength at Yield | 34 | MPa | ASTM D638 |
| Tensile Elongation at Yield | 9 | % | ASTM D638 |
| Tensile Strength at Break | 19 | MPa | ASTM D638 |
| Tensile Elongation at Break | 165 | % | ASTM D638 |
| Flexural Modulus (1% Secant) | 1300 | MPa | ASTM D790 A |
| Flexural Strength | 35 | MPa | ASTM D790 |
| Izod Impact , Notched, 23 °C | 3 | kJ/m ² | ISO 180 |
| Rockwell Hardness, R-Scale | 98 | - | ASTM D785 |
| THERMAL PROPERTIES ^{(1) (2)} | | | |
| Vicat Softening Temperature | 152 | °C | ASTM D1525 |

(1) Typical values only, not to be construed as specification limits

(2) Test specimen preparation method : Pursuant to ASTM D4101

PROCESSING CONDITIONS

Typical processing conditions for 5001P are:

Recommended extrusion temperature : 250 °C

Recommended stretching temperature : 155 °C

Recommended stretching ratio : 4 – 6

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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