

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 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 ³ | ASTM D1505 |
| Molecular Weight Distribution | Broad | - | - |
| Isotacticity | Medium | - | - |
| FORMULATION | | | |
| Anti static agent | <input type="checkbox"/> | - | - |
| Nucleating agent | <input type="checkbox"/> | - | - |
| Gas fading stabilized | <input type="checkbox"/> | - | SABIC method |
| MECHANICAL PROPERTIES | | | |
| Tensile test | | | |
| tensile modulus ⁽¹⁾ | 1550 | MPa | ISO 527-2 1A |
| strain at yield | 10 | % | ISO 527-2 1A |
| stress at yield ⁽²⁾ | 37 | MPa | ISO 527-2 1A |
| Izod impact notched | | | |
| at 23 °C | 3.5 | kJ/m ² | ISO 180/1A |
| Charpy Impact Strength Notched | | | |
| at 23 °C | 4.5 | kJ/m ² | ISO 179/1eA |
| THERMAL PROPERTIES | | | |
| Heat deflection temperature | | | |
| at 0.45 MPa (HDT/B) | 85 | °C | ISO 75 |
| at 1.80 MPa (HDT/A) | 55 | °C | ISO 75 |
| Vicat Softening Temperature ⁽³⁾ | | | |
| 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

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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