



# SABIC<sup>®</sup> PP PPA20

## PP IMPACT COPOLYMER - PROVISIONAL DATASHEET

### DESCRIPTION

SABIC<sup>®</sup> PP PPA20 is an impact copolymer with an excellent optical performance – high gloss, high scratch resistance and low stress whitening. The material exhibits high flow and impact resistance combined with high stiffness. The overall properties make this grade favorable for various applications where a good balance of mechanical and optical properties are required such as home appliances, caps and closures, houseware, food and non-food rigid packaging and furniture.

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>  
This product is not intended for and must not be used in any pharmaceutical/medical applications.

### TYPICAL PROPERTY VALUES

Revision 20190118

| PROPERTIES                                        | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                         |                |                   |              |
| <b>Melt Flow Rate</b>                             |                |                   |              |
| at 230 °C and 2.16 kg                             | 20             | dg/min            | ISO 1133     |
| <b>Density</b>                                    | 905            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>Mould shrinkage</b>                            |                |                   |              |
| 24 hours after injection moulding                 | 1.3            | %                 | SABIC method |
| <b>MECHANICAL PROPERTIES</b>                      |                |                   |              |
| <b>Tensile test</b>                               |                |                   |              |
| tensile modulus <sup>(1)</sup>                    | 1550           | MPa               | ISO 527-2 1A |
| <b>Izod impact notched</b>                        |                |                   |              |
| at 23 °C                                          | 5              | kJ/m <sup>2</sup> | ISO 180/1A   |
| at 0 °C                                           | 3              | kJ/m <sup>2</sup> | ISO 180/1A   |
| at -20 °C                                         | 2              | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b>             |                |                   |              |
| at -20 °C                                         | 2              | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at 23 °C                                          | 6              | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at 0 °C                                           | 3              | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>OPTICAL PROPERTIES</b>                         |                |                   |              |
| <b>Gloss (20°)</b>                                | 80             | %                 | ISO 2813     |
| <b>Gloss (60°)</b>                                | 90             | %                 | ASTM D2457   |
| <b>THERMAL PROPERTIES</b>                         |                |                   |              |
| <b>Heat deflection temperature <sup>(2)</sup></b> |                |                   |              |
| at 0.45 MPa (HDT/B)                               | 100            | °C                | ISO 75       |
| at 1.80 MPa (HDT/A)                               | 60             | °C                | ISO 75       |
| <b>Vicat Softening Temperature <sup>(3)</sup></b> |                |                   |              |
| at 50 N (VST/B)                                   | 80             | °C                | ISO 306      |
| at 10 N (VST/A)                                   | 151            | °C                | ISO 306      |

(1) Speed of testing: 1 mm/min

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

(3) Temperature rate: 120°C/h



## QUALITY

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

## STORAGE AND HANDLING

Avoid prolonged storage in open sunlight, high temperatures (<50 °C) and /or high humidity as this could well speed up alteration and consequently loss of quality of the material and /or its packaging. Keep material completely dry for good processing.

## 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>

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