



# SABIC<sup>®</sup> PP PHC3 1

## PP IMPACT COPOLYMER

### DESCRIPTION

SABIC<sup>®</sup> PP PHC3 1 combines high stiffness with good impact strength. Its excellent flow properties and narrow molecular weight distribution allows fast cycle-times and injection moulding of articles demanding low warpage and high dimensional stability. Typical applications are pails, containers, crates & boxes and automotive components.

### TYPICAL PROPERTY VALUES

| PROPERTIES                                        | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                         |                |                   |              |
| <b>Melt Flow Rate</b>                             |                |                   |              |
| at 230 °C and 2.16 kg                             | 15             | dg/min            | ISO 1133     |
| <b>Density</b>                                    | 905            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>FORMULATION</b>                                |                |                   |              |
| <b>Anti static agent</b>                          | □              | -                 | -            |
| <b>Nucleating agent</b>                           | □              | -                 | -            |
| <b>MECHANICAL PROPERTIES</b>                      |                |                   |              |
| <b>Tensile test</b>                               |                |                   |              |
| stress at yield                                   | 25             | MPa               | ISO 527-2 1A |
| tensile modulus <sup>(1)</sup>                    | 1300           | MPa               | ISO 527-2 1A |
| strain at yield <sup>(2)</sup>                    | 5              | %                 | ISO 527-2 1A |
| <b>Izod impact notched</b>                        |                |                   |              |
| at 0 °C                                           | 7              | kJ/m <sup>2</sup> | ISO 180/1A   |
| at 23 °C                                          | 11             | kJ/m <sup>2</sup> | ISO 180/1A   |
| at -20 °C                                         | 5              | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b>             |                |                   |              |
| at 0 °C                                           | 8              | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at -20 °C                                         | 5              | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at 23 °C                                          | 12.5           | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>Hardness Shore D</b>                           | 64             | -                 | ISO 868      |
| <b>THERMAL PROPERTIES</b>                         |                |                   |              |
| <b>Heat deflection temperature <sup>(3)</sup></b> |                |                   |              |
| at 1.80 MPa (HDT/A)                               | 55             | °C                | ISO 75       |
| at 0.45 MPa (HDT/B)                               | 80             | °C                | ISO 75       |
| <b>Vicat Softening Temperature <sup>(4)</sup></b> |                |                   |              |
| at 10 N (VST/A)                                   | 149            | °C                | ISO 306      |
| at 50 N (VST/B)                                   | 74             | °C                | ISO 306      |