

## SABIC® PP PHC27

PP IMPACT COPOLYMER

### DESCRIPTION

SABIC® PP PHC27 combines very high impact resistance, also at low temperatures, with a good stiffness and offers very good flow properties. Thanks to very low tendency to warp, it is typically used for injection moulding of crates & boxes, suitcase shells and automotive parts.

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>

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](http://www.ul.com)) / IMDS 80775790

### TYPICAL PROPERTY VALUES

Revision 20260216

| PROPERTIES                                        | TYPICAL VALUES | UNITS  | TEST METHODS |
|---------------------------------------------------|----------------|--------|--------------|
| <b>POLYMER PROPERTIES</b>                         |                |        |              |
| <b>Melt Flow Rate (MFR)</b>                       |                |        |              |
| at 230 °C and 2.16 kg                             | 14             | dg/min | ISO 1133     |
| <b>Density</b>                                    | 905            | kg/m³  | ASTM D1505   |
| <b>FORMULATION</b>                                |                |        |              |
| <b>UV stabilized</b>                              | □              | -      | -            |
| <b>Anti static agent</b>                          | □              | -      | -            |
| <b>Nucleating agent</b>                           | □              | -      | -            |
| <b>MECHANICAL PROPERTIES</b>                      |                |        |              |
| <b>Tensile test</b>                               |                |        |              |
| strain at yield <sup>(1)</sup>                    | 6              | %      | ISO 527-2 1A |
| stress at yield                                   | 21             | MPa    | ISO 527-2 1A |
| tensile modulus <sup>(2)</sup>                    | 1000           | MPa    | ISO 527-2 1A |
| <b>Izod impact notched</b>                        |                |        |              |
| at 0 °C                                           | 13             | kJ/m²  | ISO 180/1A   |
| at -20 °C                                         | 9              | kJ/m²  | ISO 180/1A   |
| <b>Izod impact notched</b>                        |                |        |              |
| at 23 °C                                          | No Break       | kJ/m²  | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b>             |                |        |              |
| at 0 °C                                           | 15             | kJ/m²  | ISO 179/1eA  |
| at -20 °C                                         | 8              | kJ/m²  | ISO 179/1eA  |
| at 23 °C                                          | 60             | kJ/m²  | ISO 179/1eA  |
| <b>Charpy impact unnotched</b>                    |                |        |              |
| at 23 °C                                          | No Break       | kJ/m²  | ISO 179/1eU  |
| <b>Hardness Shore D</b>                           | 60             | -      | ISO 868      |
| <b>THERMAL PROPERTIES</b>                         |                |        |              |
| <b>Heat deflection temperature <sup>(3)</sup></b> |                |        |              |
| at 0.45 MPa (HDT/B)                               | 80             | °C     | ISO 75       |

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CHEMISTRY THAT MATTERS™



| PROPERTIES                                        | TYPICAL VALUES | UNITS | TEST METHODS |
|---------------------------------------------------|----------------|-------|--------------|
| at 1.80 MPa (HDT/A)                               | 50             | °C    | ISO 75       |
| <b>Vicat Softening Temperature <sup>(4)</sup></b> |                |       |              |
| at 10 N (VST/A)                                   | 145            | °C    | ISO 306      |
| at 50 N (VST/B)                                   | 65             | °C    | ISO 306      |

- (1) Speed of testing: 50 mm/min  
(2) Speed of testing: 1 mm/min  
(3) Flat wise ( testbar 80\*10\*4mm)  
(4) Temperature rate: 120°C/h

#### 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.

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