

## SABIC® PP PCGH19

### PP homopolymer for Healthcare

#### Description:

SABIC® PP grades for healthcare applications are produced under controlled conditions resulting in high product quality, consistency and a high level of purity.

SABIC® PP PCGH19 is typically designed for injection molding of healthcare applications such as caps and closures, 3-part syringes and other thin walled parts. This grade offers a high stiffness combined with excellent flow properties. Due to its narrow molecular weight distribution it is very suitable for thin walled, warpage critical applications.

#### Compliance to regulations:

SABIC® PP PCGH19 complies with the relevant monographs of the European Pharmacopoeia (EP) and the United States Pharmacopoeia (USPVI). The product mentioned herein may not be used for medical healthcare devices or materials intended for temporary or permanent implementation in the human body.

IMDS 7172624

#### Typical values

Revision 20140423

Properties	Unit (SI)	Values	Test methods
<b>Polymer properties</b>			
<b>Melt flow rate (MFR)</b> at 230 °C and 2.16 kg	g/10 min	<b>19</b>	ASTM D 1238
<b>Density</b>	kg/m <sup>3</sup>	<b>905</b>	ASTM D 792
<b>Formulation</b>			
<b>Anti static agent</b>	-	<b>No</b>	-
<b>Nucleating agent</b>	-	<b>No</b>	-
<b>Mechanical properties</b>			
<b>Tensile test</b>			ASTM D 638
stress at yield <sup>1)</sup>	MPa	<b>37</b>	
strain at yield <sup>1)</sup>	%	<b>9</b>	
secant modulus at 1% elongation <sup>2)</sup>	MPa	<b>1850</b>	
<b>Izod impact notched</b> at 23 °C	J/m	<b>25</b>	ASTM D 256A
<b>Rockwell hardness</b> R-scale	-	<b>112</b>	ASTM D 785
<b>Thermal properties</b>			
<b>Heat deflection temperature</b> at 1.80 MPa (HDT/A)	°C	<b>65</b>	ASTM D 648
at 0.45 MPa (HDT/B)	°C	<b>95</b>	ASTM D 1525
<b>Vicat softening temperature</b> at 10 N (VST/A) <sup>3)</sup>	°C	<b>152</b>	
at 50 N (VST/B)	°C	<b>94</b>	

1) Speed of testing: 50 mm/min

2) Speed of testing: 1 mm/min

3) Temperature rate: 120°C/h

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**Healthcare policy.** Do not use this SABIC product in all medical applications involving any of the following medical devices in accordance with the classification criteria and definitions as outlined in annex IX of the EU council directive on medical devices (93/42/EEC of 14 June 1993 including amendments):

1. Class IIB implantable medical devices, and both short-term (not including transient use) and long term surgically invasive devices;
2. All medical devices in class III.

**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.

**Disclaimer.** The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by SABIC Europe B.V.