



# 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.

### 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	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