

# SABIC<sup>®</sup> PP PCGR40L

PP RANDOM COPOLYMER

## DESCRIPTION

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

SABIC<sup>®</sup> PP PCGR40L is a highly transparent polypropylene random copolymer with good antistatic properties. This grade combines improved aesthetics of the finished articles with low temperature processability and a very good organoleptic performance. Part aesthetics are not affected by the lower temperatures, providing for a broader operating window, enabling short cycle times. SABIC<sup>®</sup> PP PCGR40L results in excellent demoulding characteristics and has a good stiffness to impact ratio.

Typical applications: SABIC<sup>®</sup> PP PCGR40L is typically used for injection moulding of housings for empty disposable 2-part syringes. A lubrication agent is added to reduce friction between moving parts. Other applications demanding a high level of transparency and friction optimization are also possible.

Compliance to regulations: SABIC<sup>®</sup> PP PCGR40L complies with the food contact regulations and the relevant monographs of the US Pharmacopoeia.

## TYPICAL PROPERTY VALUES

Revision 20181012

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</b>			
at 230 °C and 2.16 kg	40	dg/min	ISO 1133
<b>Density</b>	905	kg/m <sup>3</sup>	ASTM D1505
<b>FORMULATION</b>			
<b>Slip agent</b>	☑	-	-
<b>Clarified</b>	☑	-	-
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile test</b>			
tensile modulus <sup>(1)</sup>	1150	MPa	ISO 527-2 1A
stress at yield	29	MPa	ISO 527-2 1A
strain at yield <sup>(2)</sup>	13	%	ISO 527-2 1A
<b>Izod impact notched</b>			
at 0 °C	2.0	kJ/m <sup>2</sup>	ISO 180/1A
at 23 °C	4.0	kJ/m <sup>2</sup>	ISO 180/1A
<b>Charpy Impact Strength Notched</b>			
at 0 °C	2.0	kJ/m <sup>2</sup>	ISO 179/1eA
at 23 °C	4.5	kJ/m <sup>2</sup>	ISO 179/1eA

(1) Speed of testing: 1 mm/min

(2) Speed of testing: 50 mm/min



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