

SABIC® PP PCGR40L

PP RANDOM COPOLYMER

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 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® PP PCGR40L results in excellent demoulding characteristics and has a good stiffness to impact ratio.

Typical applications: SABIC® 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® PP PCGR40L complies with the food contact regulations and the relevant monographs of the US Pharmacopoeia.

TYPICAL PROPERTY VALUES

Revision 20220721

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

(1) Speed of testing: 1 mm/min

(2) Speed of testing: 50 mm/min

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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