

SABIC® PP PCGR40

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 PCGR40 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 PCGR40 results in excellent demoulding characteristics and has a good stiffness to impact ratio.

Typical applications: SABIC® PP PCGR40 is typically used for injection moulding of housings for empty disposable 3-part syringes. Other applications demanding a high level of transparency and broad processing window are also possible.

Compliance to regulations: SABIC® PP PCGR40 complies with the food contact regulations and the relevant monographs of the US Pharmacopoeia.

TYPICAL PROPERTY VALUES

| 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/m³ | ASTM D1505 |
| FORMULATION | | | |
| Anti static agent | ☑ | - | - |
| Clarified | ☑ | - | - |
| 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/m² | ISO 180/1A |
| at 23 °C | 4.0 | kJ/m² | ISO 180/1A |
| Charpy Impact Strength Notched | | | |
| at 0 °C | 2.0 | kJ/m² | ISO 179/1eA |
| at 23 °C | 4.5 | kJ/m² | ISO 179/1eA |

(1) Speed of testing: 1 mm/min

(2) Speed of testing: 50 mm/min

