

SABIC® PET PCG60

CRYSTALLINE POLYETHYLENE TEREPHTHALATE (PET)

DESCRIPTION

SABIC® PET PCG60 for healthcare applications is produced under controlled conditions resulting in high product quality, consistency and a high level of purity. It is a crystalline, low molecular weight thermoplastic polymer made by continuous melt-phase polymerization process followed by solid-state polymerization.

SABIC® PET PCG60 is a specially formulated medical grade complying European and US pharmacopeia requirements. This grade exhibits easy flow ability which benefits thin walled injection molding process.

TYPICAL APPLICATIONS

PET PCG60 is especially suitable for the production of medical blood tubes.

TYPICAL PROPERTY VALUES

Revision 20230421

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|------------------------------------|----------------|-------------------|--------------|
| PHYSICAL PROPERTIES | | | |
| Intrinsic Viscosity ⁽¹⁾ | 0.6 ± 0.02 | dl/g | SABIC method |
| Crystalline Density | <1390 | kg/m ³ | SABIC method |
| Moisture Content ⁽²⁾ | <0.35 | Wt. % | SABIC method |
| POLYMER PROPERTIES | | | |
| Color (b) | -1.5 ± 2.0 | b-value | IRC 0051 |
| Dust Content | <0.01 | Wt. % | SABIC method |
| Bulk Density | 838 ± 10 | kg/m ³ | ASTM D1895 |
| OPTICAL PROPERTIES | | | |
| Color (L) | >80 | - | SABIC method |

(1) Typical values; not to be construed as specification limits.

(2) At Equilibrium, Typical values; not to be construed as specification limits.

PROCESSING CONDITIONS

The PET PCG60 has to be dried to moisture content below about 30-40 ppm. The drying conditions typically used are 170 °C for 5 hours; the dew point of the drying air should be at least -40 °C. Typically, injection temperatures of 285 °C may be used to get clear blood tubes.

STORAGE AND HANDLING

PET resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry with relative humidity below 50% and temperatures preferably don't exceed 50 °C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PET within 6 months after delivery.

DISCLAIMER

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