

SABIC® LDPE PCG09

LOW DENSITY POLYETHYLENE

DESCRIPTION

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

SABIC® LDPE PCG09 is an additive free grade, typically designed for healthcare packaging and can typically be converted by Injection Molding and Cast Film to produce caps and closures, small bottles and secondary packaging.

Compliance to Regulations

SABIC® LDPE PCG09 complies with the relevant monographs of the European Pharmacopoeia (EP) and the United States Pharmacopoeia (USPVI).

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	7.5	dg/min	ISO 1133
at 190 °C and 5 kg	25	dg/min	ISO 1133
Melt volume rate (MVR)			
at 190 °C and 2.16 kg	10	ml/10 min	ISO 1133
at 190 °C and 5 kg	33	ml/10 min	ISO 1133
Density	924	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test ⁽¹⁾			
tensile modulus	170	MPa	ISO 527/1A
stress at break	10	MPa	ISO 527/1A
strain at break	100	%	ISO 527/1A
stress at yield	9	MPa	ISO 527/1A
Izod impact notched			
at 23 °C	50	kJ/m ²	ISO 180/A
at -30 °C	8	kJ/m ²	ISO 180/A
Hardness Shore D	41	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature			
at 0.45 MPa (HDT/B)	46	°C	ISO 75-2
Vicat Softening Temperature ^{(2) (3)}			
at 10 N (VST/A)	93	°C	ISO 306
DSC test			
melting point	110	°C	DIN 53765
enthalpy change	138	J/g	DIN 53765

(1) Speed of testing: 50 mm/min

(2) Based on injection moulded test specimens

(3) Conditioning of test specimen: temp. 23 °C, relative humidity 50 %, 24 hours