

SABIC® LDPE PCG22

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 PCG22 is an additive free grade, typically designed for healthcare packaging and can typically be converted by Injection Molding to produce caps and closures. It exhibits a high MFR for good flow properties.

Compliance to Regulations

SABIC® LDPE PCG22 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 5 kg	75	dg/min	ISO 1133
at 190 °C and 2.16 kg	22	dg/min	ISO 1133
Melt volume rate (MVR)			
at 190 °C and 5 kg	98	ml/10 min	ISO 1133
at 190 °C and 2.16 kg	29	ml/10 min	ISO 1133
Density	919	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test ⁽¹⁾ ⁽²⁾			
strain at break	400	%	ISO 527-2
stress at yield	8	MPa	ISO 527-2
stress at break	7	MPa	ISO 527-2
tensile modulus	175	MPa	ISO 527-2
Creep modulus ⁽³⁾ ⁽⁴⁾			
after 1 hour	80	MPa	ISO 899
after 1000 hours	45	MPa	ISO 899
Izod impact notched			
at 23 °C	42	kJ/m ²	ISO 180/A
at -30 °C	5.0	kJ/m ²	ISO 180/A
Hardness Shore D	45	-	ISO 868
THERMAL PROPERTIES			
Heat deflection temperature ⁽⁵⁾			
at 0.45 MPa (HDT/B)	39	°C	ISO 75-2
Vicat Softening Temperature			
at 10 N (VST/A)	82	°C	ISO 306
DSC test			
enthalpy change	104	J/g	DIN 53765
melting point	105	°C	DIN 53765