

SABIC® LDPE PCG01

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 PCG01 is an additive-free grade produced using SABIC's proprietary high pressure Clean Tubular Reactor (CTR®) which typically ensures grades with high purity. It is typically used for semi-rigid containers obtained by Blow Fill Seal (BFS) process and medical films.

Compliance to Regulations

SABIC® LDPE PCG01 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	0.75	dg/min	ISO 1133
Density	925	kg/m³	ASTM D1505
OPTICAL PROPERTIES			
Gloss (45°)	55	%	ASTM D2457
Haze	10	%	ASTM D1003
FILM PROPERTIES			
Impact strength	15	kJ/m	ASTM D4272
Tear strength TD	45	kN/m	ISO 6383-2
Tear strength MD	45	kN/m	ISO 6383-2
Tensile test film			
Modulus of elasticity TD	200	MPa	ISO 527-3
Yield stress TD	12	MPa	ISO 527-3
Stress at break TD	20	MPa	ISO 527-3
Stress at break MD	25	MPa	ISO 527-3
Tensile test film			
Strain at break TD	>500	%	ISO 527-3
Strain at break MD	>200	%	ISO 527-3
Coefficient of friction	0.9	-	ASTM D1894
Blocking	20	g	SABIC method
Re-blocking	<5	g	SABIC method
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	98	°C	ISO 306
DSC test			
melting point	113	°C	DIN 53765