



# SABIC® LDPE PCG80

## 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 PCG80 is an additive-free grade produced using SABICs 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 PCG80 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
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
at 190 °C and 2.16 kg	0.33	dg/min	ISO 1133
<b>Density</b>	922	kg/m³	ASTM D1505
<b>OPTICAL PROPERTIES</b>			
<b>Gloss (45°)</b>	57	%	ASTM D2457
<b>Haze</b>	8	%	ASTM D1003
<b>FILM PROPERTIES</b>			
<b>Impact strength</b>	30	kJ/m	ASTM D4272
<b>Tear strength TD</b>	40	kN/m	ISO 6383-2
<b>Tear strength MD</b>	35	kN/m	ISO 6383-2
<b>Tensile test film</b>			
Stress at break TD	22	MPa	ISO 527-3
Yield stress TD	11	MPa	ISO 527-3
Modulus of elasticity TD	190	MPa	ISO 527-3
Stress at break MD	27	MPa	ISO 527-3
<b>Tensile test film</b>			
Strain at break MD	>200	%	ISO 527-3
Strain at break TD	>500	%	ISO 527-3
<b>Coefficient of friction</b>	1.0	-	ASTM D1894
<b>Blocking</b>	30	g	SABIC method
<b>Re-blocking</b>	10	g	SABIC method
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>			
at 10 N (VST/A)	98	°C	ISO 306
<b>DSC test</b>			
melting point	108	°C	DIN 53765