



# SABIC® LLDPE PCG61

## LINEAR LOW DENSITY POLYETHYLENE

### DESCRIPTION

SABIC® LLDPE PCG61 is a hexene-linear low density polyethylene typically used for healthcare applications. Films made from this resin exhibit good mechanical, optical and hottack properties.

Typical application for SABIC® LLDPE PCG61 are pharmaceutical films, bags and pouches requiring good impact strength, tear resistance,optical performance andhottack properties.

Film properties: Film of 50 µm and BUR = 2 has been produced on Kiefel IBC with 140 kg/h. Die size 200 mm, die gap 2.7 mm.

Compliance to RegulationsSABIC® LLDPE PCG61 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	0.9	dg/min	ISO 1133
<b>Density</b>	918	kg/m³	ASTM D1505
<b>OPTICAL PROPERTIES</b>			
<b>Gloss (45°)</b>	57	%	ASTM D2457
<b>Haze</b>	13	%	ASTM D1003
<b>FILM PROPERTIES</b>			
<b>Impact strength</b>	35	kJ/m	ASTM D4272
<b>Tear strength TD</b>	400	kN/m	ISO 6383-2
<b>Tear strength MD</b>	100	kN/m	ISO 6383-2
<b>Puncture resistance</b>	750	J/m	SABIC method
<b>Tensile test film</b>			
Yield stress TD	12.5	MPa	ISO 527-3
Yield stress MD	11	MPa	ISO 527-3
Stress at break TD	40	MPa	ISO 527-3
Stress at break MD	47	MPa	ISO 527-3
Strain at break TD	800	%	ISO 527-3
Strain at break MD	630	%	ISO 527-3
Modulus of elasticity TD	230	MPa	ISO 527-3
Modulus of elasticity MD	190	MPa	ISO 527-3
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>			
at 10 N (VST/A)	106	°C	ISO 306
<b>DSC test</b>			
melting point	124	°C	SABIC method