



SABIC® HDPE PCGF0863

HIGH DENSITY POLYETHYLENE

DESCRIPTION

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

SABIC® HDPE PCGF0863 resin is a high density homopolymer with good barrier properties. The grade offers high stiffness, high temperature resistance and relatively high grease resistance. The resin has a low gel level.

SABIC® HDPE PCGF0863 is typically used for flexible packaging, pharmaceuticals and devices and release liners.

Film properties have been measured at cast film of 25 µm. Water vapor permeability at 38 °C and 100 % RH per 24 h. Oxygen permeability at 23 °C and 0 % RH per 24 h.

Compliance to regulations.

SABIC® HDPE PCGF0863 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	8	dg/min	ISO 1133
Density	964	kg/m ³	ISO 1183
FILM PROPERTIES			
Tensile test film			
Yield stress TD	24	MPa	ISO 527-3
Yield stress MD	26	MPa	ISO 527-3
Stress at break TD	18	MPa	ISO 527-3
Stress at break MD	22	MPa	ISO 527-3
Strain at break TD	800	%	ISO 527-3
Strain at break MD	700	%	ISO 527-3
Modulus of elasticity TD	580	MPa	ISO 527-3
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Permeability			
water vapour (H ₂ O)	4.0	g/m ² day	SABIC method
oxygen (O ₂)	0.1	ml/m ² day	SABIC method
THERMAL PROPERTIES			
DSC test			
melting point	134	°C	DIN 53765
enthalpy change	224	J/g	DIN 53765