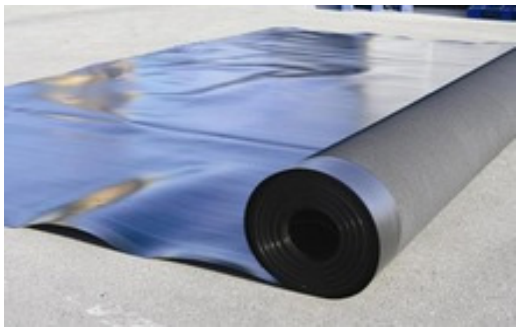
Specialist Geomembranes

Technical Data Sheet
Landflex™ PE50HD Smooth



A high quality, single layer HDPE suitable for use as a barrier membrane on brownfield sites, petrol stations, coalfields, landfill & contaminated industrial areas. The material is highly suited to attenuation ponds, lagoons, water features & as a high peformance damp proof membrane because of its high puncture resistance. The membrane offers protection from all levels of hydrocarbons including Carbon Dioxide, Methane and Radon.

All Landflex PE-HD geomembranes are certified according to the relevant European Standards:
EN 13361, EN 13362, EN 13491, EN 13492, EN 13493, EN 15382 & EN 13967

The information herein is based upon data obtained by the manufacturer and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data. This information is furnished upon the condition that the person receiving it shall evaluate its suitability for the specific application.

Material Properties	Unit	Test Method	Typical Values
Density	g/cm³	DIN EN ISO 1183-1	> 0.940
Melt flow range 190/2.16	g/10min	DIN EN ISO 1133	0.10 - 0.50
Carbon black content (TGA)	%	ASTM D 1603	2.0 - 3.0
Carbon black dispersion	Category	ASTM D 5596	1 - 2
Durability			
Oxidation resistance	-	DIN EN 14575	Fulfilled
Oxidative induction time (OIT)	min	ASTM D 3895	>100
Stress crack resistance	h	DIN EN 14576	>700
Weathering resistance	h	DIN EN 12224	>3000
Root resistance	-	DIN EN 14416	Fulfilled
Resistance to Leaching	-	DIN EN 14415	Fulfilled
Chemical resistance	-	DIN EN 14414	Fulfilled
Microbiological resistance	-	DIN EN 12225	Fulfilled
Functional Properties			
Foldability at low temperatures	°C	DIN EN 495-5	< -60
Dimensional stability	%	DIN EN 1107-2	<1.0
Water absoption after 7 days	%	DIN ISO 175	< 0.04
Mechanical Properties			
Thickness Tolerance	mm %	DIN EN 1849-2	0.50 ±5
Tensile strength at yield Tolerance	MPa	DIN EN ISO 527 Type 5 100mm/min	19 -3
Elongation at yield Tolerance	%		10 -2
Tensile strength at break Tolerance	MPa		30 -3

BUTEK Tanks
BUTEK Landline

Specialist divisions of Butyl Products Ltd
T: +44 (0) 1277 653 281
E: enquiries@butektanks.co.uk W: butektanks.com
E: enquiries@butek-landline.co.uk W: buteklandline.co.uk

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Material Properties	Unit	Test Method	Typical Values
Elongation at break Tolerance	%	DIN EN ISO 527 Type 5 100mm/min	800 -100
Tear resistance Tolerance	N/mm	ISO 34, Method B Procedure (a) 50mm/min	150 -20
Static puncture Tolerance	kN	DIN EN ISO 12236	2.0 -1.0
Bursting pressure	%	DIN 61551	>10



Example application: Water Feauture / Lake Lining

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