Specialist Geomembranes

Technical Data Sheet

Landflex™ BR Range
0.75, 1.00, 1.50 & 2.0mm Butyl Rubber



Versatile, highly flexible and suitable for a number of applications including:

- Pond and green roof linings
- Tank linings
- Water features, reservoirs, lagoons
- Canals, lakes, rivers
- Fire suppression systems

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 0.75mm	Typical Values 1.00mm	Typical Values 1.50mm	Typical Values 2.00mm
Thickness	mm	Internal	0.75 ±10%	1.00 ±10%	1.50 ±10%	2.00 ±10%
Width	m	Internal	1.70	1.70	1.70	1.70
Specific gravity	-	BS ISO 2781	1.24 ±0.03	1.24 ±0.03	-	-
		BS 903 Part A1	-	-	1.24 ±0.03	1.24 ±0.03
Tensile strength	MPa	BS ISO 37	9.0	9.0	-	-
		BS 903 Part A2	-	-	10.0	10.0
Elongation at break	%	BS ISO 37	350	350	-	-
		BS 903 Part A2	-	-	350	350
Tear strength	N/mm	BS ISO 34	30	30	40	40
Ozone resistance (7days/ 50pphm/ 30°C)	-	BS ISO 1431	50% extension No cracks	50% extension No cracks	-	-
		BS 903 Part A43	-	-	50% extension No cracks	50% extension No cracks
Heat ageing (retentions) (7 days @ 100°C)	MPa %	BS ISO 188	8.0 250%	8.0 250%	8.0 250%	8.0 250%
Flex cracking	Cycles	BS ISO 132	200,000 No cracks	200,000 No cracks	200,000 No cracks	200,000 No cracks
Operating temperature range	°C	BS 903	-40 to +130	-40 to +130	-40 to +130	-40 to +130
Dimensional stability	-	1 hr at 100°C	± 1% Max.	± 1% Max.	± 1% Max.	± 1% Max.





Example applications:
Left: Pressure vessel bladders Above: Water Treatment Works holding ponds



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

Specialist Geomembranes

Chemical Resistance

Landflex BR75, BR100, BR150, BR200, BR200WRAS23
Landflex BR200WRAS60, RBR90, RBR120, RBR190

A = Little to minor effect B = Some minor to moderate effect

All properties are at room temperature. Performance at elevated temperatures may be significantly different for some chemicals

Chemical		Chemical		Chemical	
Acetaldehyde	A	Acetamide	A	Acetic Acid 30%	B
Acetic Acid, Glacial	B	Acetic Anhydride	B	Acetone	A
Acetophenone	A	Acetylene	A	Aluminium Acetate	A
Aluminium Chloride	A	Aluminium Fluoride	A	Aluminium Nitrate	A
Aluminium Phosphate	A	Aluminium Sulphate	A	Ammonia Anhydrous	A
Ammonia Gas (Cold)	A	Ammonia Gas (Hot)	B	Ammonium Carbonate	A
Ammonium Chloride	A	Ammonium Hydroxide	A	Ammonium Persulphate	A
Ammonium Nitrate	A	Ammonium Phosphate	A	Ammonium Sulphate	A
Amyl Acetate	A	Amyl Alcohol	A	Aniline	B
Aniline Dyes	B	Aniline Hydrochloride	B	Animal Fats	B
Arsenic Acid	A				
Barium Chloride	A	Barium Hydroxide	A	Barium Sulphate	A
Barium Sulphide	A	Beer	A	Beet Sugar Liquors	A
Benzaldehyde	A	Benzoic Acid	A	Benzyl Alcohol	B
Benzyl Benzoate	B	Bleach Solutions	A	Borax	A
Bordeaux Mixture	A	Boric Acid	A	Brine	A
Butter	B	Butyl Acetate	B	Butyl Acetyl Ricinoleate	A
Butyl Alcohol	B	Butyl Benzoate	A	Butyl Carbitol	A
Butyl Cellosolve	A	Butyl Oleate	B	Butyl Stearate	B
Butyraldehyde	B				
Calcium Acetate	A	Calcium Chloride	A	Calcium Hydroxide	A
Calcium Hypochlorite	A	Calcium Nitrate	A	Calcium Sulphide	A
Cane Sugar Liquors	A	Carbamate	B	Carbitol	B
Carbolic Acid	B	Carbon Dioxide	A	Carbon Monoxide	A
Carbonic Acid	A	Castor Oil	B	Cellosolve	B
Cellosolve Acetate	B	Cellulube	A	Chloroacetic Acid	B
Chloroacetone	B	Chlorobromomethane	B	Citric Acid	A
Cobalt Chloride	A	Coconut Oil	A	Cod Liver Oil	A
Copper Acetate	A	Copper Chloride	A	Copper Cyanide	A

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

Specialist Geomembranes

Chemical Resistance

Landflex BR75, BR100, BR150, BR200, BR200WRAS23
Landflex BR200WRAS60, RBR90, RBR120, RBR190

A = Little to minor effect B = Some minor to moderate effect

All properties are at room temperature. Performance at elevated temperatures may be significantly different for some chemicals

Chemical		Chemical		Chemical	
Copper Sulphate	A	Corn Oil	B	Cyclohexanone	B
Denatured Alcohol	A	Detergent Solutions	A	Developing Fluids	B
Diacetone	A	Diacetone Alcohol	A	Dibenzyl Ether	B
Dibenzyl Sebecate	B	Dibutyl Phthalate	B	Dibutyl Sebecate	B
Diethlamine	B	Diethyl Sebecate	B	Diethylene Glycol	A
Diisopropyl Ketone	A	Dimethyl Phthalate	B	Dioctyl Phthalate	B
Epichlorohydrin	B	Ethanolamine	B	Ethyl Acetate	B
Ethyl Acetoacetate	B	Ethyl Acrylate	B	Ethyl Alcohol	A
Ethyl Benzoate	B	Ethyl Cellosolve	B	Ethyl Cellulose	B
Ethyl Oxalate	A	Ethylene Diamine	A	Ethyl Chloride	A
Ethyl Formate	B	Ethyl Silicate	A	Ethylene Glycol	A
Ferric Chloride	A	Ferric Nitrate	A	Ferric Sulphate	A
Fluorinated Cyclic Ethers	A	Fluoroboric Acid	A	Fluorocarbon Oils	A
Fluorolube	A	Fluosilic Acid	A	Formaldehyde	A
Formic Acid	A	Freon 12	B	Freon 13	A
Freon 13B1	A	Freon 22	A	Freon 31	A
Freon 32	A	Freon 114	A	Freon 115	A
Freon 142B	A	Freon 152A	A	Freon 502	A
Freon C316	A	Freon C318	A	Freon TA	A
Freon TC	A	Freon TMC	B	Freon T-P35	A
Freon T-WD602	A	Fufural	B		
Gallic Acid	B	Gelatin	A	Glauber's Salt	B
Glycerin	A	Glycols	A	Glucose	A
Glue	A	Green Sulphate Liquor	A	n-Hexaldehyde	B
Hydrazine	A	Hydrobromic Acid	A	Hydrochloric Acid (Cold)	A
Hypochlorous Acid	B	Hydrocyanic Acid	A	Hydrofluoric Acid Anhydrous	B
Hydrofluoric Acid (Conc. Cold)	B	Hydrofluosilic Acid	A	Hydrogen Gas	A
Hydrogen Sulphide (Wet,Cold)	A	Hydrogen Sulphide (Wet, Hot)	A		

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

Specialist Geomembranes

Chemical Resistance

Landflex BR75, BR100, BR150, BR200, BR200WRAS23
Landflex BR200WRAS60, RBR90, RBR120, RBR190

A = Little to minor effect B = Some minor to moderate effect

All properties are at room temperature. Performance at elevated temperatures may be significantly different for some chemicals

Chemical		Chemical		Chemical	
Iodoform	A	Isobutyl Alcohol	A	Isophorone	A
Isopropyl Acetate	A	Isopropyl Alcohol	A		
Lactic Acid	A	Lead Acetate	A	Lead Nitrate	A
Lead Sulphamate	A	Lime Bleach	A	Lime Sulphur	A
Lindol	A	Linseed Oil	B	Lye	A
Magnesium Chloride	A	Magnesium Hydroxide	A	Mercuric Chloride	A
Mercury	A	Mesityl Oxide	B	Methyl Acetate	B
Methyl Acrylate	B	Methyl Alcohol	A	Methyl Butyl Ketone	A
Methyl Cellosolve	B	Methyl Formate	B	Methyl Oleate	B
Methyl Salicylate	B	Methyacrylic Acid	B	Milk	A
Monoethanolamine	B	Monovinyl Acetylene	A	Mustad Gas	A
Neatsfoot Oil	B	Neville Acid	B	Nickel Acetate	A
Nickel Chloride	A	Nickel Sulphate	A	Niter Cake	A
Nitric Acid Dilute	B	Notroethane	B	Nitrogen	A
Octyl Alcohol	A	Oleic Acid	B	Olive OIl	B
Oxalic Acid	A	Oxygen Cold	A	Ozone	B
Palmitic Acid	B	Perchloric Acid	B	Phenol	B
Phosphorous Trichloride	A	Phorone	B	Phosphoric Acid 20%	A
Phosphoric Acid 45%	B	Picric Acid	B	Plating Solution Chrome	A
Plating Solution Others	A	Polyvinyl Acetate Emulsion	A	Potassium Acetate	A
Potassium Chloride	A	Potassium Cupro Cyanide	A	Potassium Cyanide	A
Potassium Dichromate	A	Potassium Hydroxide	A	Potassium Nitrate	A
Potassium Sulphate	A	Propyl Acetate	B	n-Propyl Acetate	A
Propyl Alcohol	A	Propyl Nitrate	B	Propylene Oxide	B
Pydrauls	B	Pyridine	B	Pyroligneous Acid	B
Rapeseed OIl	A				
Sal Ammoniac	A	Salicylic Acid	A	Salt Water	A
Sewage	B	Silicone Greases	A	Silicone Oils	A

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

Specialist Geomembranes

Chemical Resistance

Landflex BR75, BR100, BR150, BR200, BR200WRAS23
Landflex BR200WRAS60, RBR90, RBR120, RBR190

A = Little to minor effect B = Some minor to moderate effect

All properties are at room temperature. Performance at elevated temperatures may be significantly different for some chemicals

Chemical		Chemical		Chemical	
Silver Nitrate	A	Skydrol 500	B	Skydrol 7000	A
Soap Solutions	A	Soda Ash	A	Sodium Acetate	A
Sodium Bicarbonate	A	Sodium Bisulphate	A	Sodium Borate	A
Sodium Chloride	A	Sodium Cyanide	A	Sodium Hydroxide	A
Sodium Hypochlorite	B	Sodium Metaphosphate	A	Sodium Nitrate	A
Sodium Perborate	A	Sodium Peroxide	A	Sodium Phosphate	A
Sodium Silicate	A	Sodium Sulphate	A	Sodium Thiosulphate	A
Stannic (ous) Chloride	B	Steam under 300°F	A	Sucrose Solution	A
Sulphite Liquors	B	Sulphur	A	Sulphur Dioxide	B
Sulphur Hexafluoride	A	Sulphur Trioxide	B	Sulphuric Acid (Dilute)	B
Sulphuric Acid (Conc.)	B	Sulphurous Acid	B		
Tannic Acid	A	Tartaric Acid	B	Tertiary Butyl Alcohol	B
Tertiary butyl Catechol	B	Tetrabutyl Titanate	B	Tetrahydrofuran	B
Triacetin	A	Triaryl Phosphate	A	Tributyl Ethyl Phosphate	A
Tributyl Phosphate	A	Trichloroacetic Acid	B	Tricresyl Phosphate	B
Triethanol Amine	B	Trioctyl Phosphate	A	Toluene Diisocyanate	A
Unsymmetrical Dimethyl Hydrazine (udmh)	A	Urea	A		
Vegetable Oils	A	Versilube	A	Vinegar	A
Wagner 21B Fluid	B	Water	A	Whisky, Wines	A
Zeolites	A	Zinc Acetate	A	Zinc Chloride	A
Zinc Sulphate	A				

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