



Butoflex 650

薬品名 濃度%	CAS #	透過正結果 (分)	Permeation level	Standard	Degradatio level	Rating
イソプロピルアルコール99%	67-63-0	480	6	EN 374-3:2003	4	++
酢酸10%	64-19-7	480	6	EN 374-3:2003	4	++
酢酸50%	64-19-7	480	6	EN 374-3:2003	4	++
酢酸99%	64-19-7	480	6	EN 16523-1:2015	4	++
アセトン99%	67-64-1	480	6	EN 16523-1:2015	4	++
アセトニトリル99%	75-05-8	480	6	EN 16523-1:2015	4	++
アクリル酸95%	79-10-7	480	6	EN 374-3:2003	4	++
アクリル酸99%	79-10-7	480	6	EN 374-3:2003	4	++
アンモニア99%	7664-41-7	480	6	EN 374-3:2003	NT	NA
水酸化アンモニウム水25%	1336-21-6	480	6	EN 16523-1:2015	4	++
二硫化炭素99%	75-15-0	1	0	EN 374-3:2003	4	=
塩素100%	7782-50-5	480	6	EN 374-3:2003	NT	NA
ジクロロメタン (別名塩化メチレン) 99%	75-09-2	12	1	EN 374-3:2003	2	=
ジエチルアミン98%	109-89-7	11	1	EN 374-3:2003	2	=
N, N-ジメチルホルムアミド99%	68-12-2	480	6	EN 374-3:2003	4	++
エタノール95%	64-17-5	480	6	EN 374-3:2003	4	++
酢酸エチル99%	141-78-6	158	4	EN 16523-1:2015	4	++
メタクリル酸アルキル (C = 2 ~ 20) 99%	97-63-2	81	3	ASTM F739	NT	NA
ホルムアルデヒド37%	50-00-0	480	6	EN 16523-1:2015	NT	NA
ギ酸100%	64-18-6	NT	NT		4	NA
ギ酸96%	64-18-6	NT	NT		4	NA
塩酸10%	7647-01-0	NT	NT		4	NA
塩酸35%	7647-01-0	NT	NT		4	NA
塩酸37%	7647-01-0	NT	NT		4	NA
フッ化水素10%	7664-39-3	480	6	EN 374-3:2003	NT	NA
フッ化水素40%	7664-39-3	480	6	EN 16523-1:2015	NT	NA

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.
- Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended**, these gloves are deemed unsuitable for work with this chemical.

NT: Not tested

NA: "Not applicable" because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time



Butoflex 650

薬品名 濃度%	CAS #	透過正結果 (分)	Permeation level	Standard	Degradatio level	Rating
フッ化水素49%	7664-39-3	480	6	EN 374-3:2003	NT	NA
臭化水素100%	10035-10-6	NT	NT		4	NA
臭化水素47%	10035-10-6	NT	NT		4	NA
塩酸99%	7647-01-0	480	6	EN 374-3:2003	NT	NA
フッ化水素100%	7664-39-3	4	0	EN 16523-1:2015	NT	NA
過酸化水素30%	7722-84-1	480	6	EN 16523-1:2015	NT	NA
メタクリル酸アルキル (C = 2 ~ 20) 97%	97-86-9	105	3	ASTM F739	NT	NA
メタノール85%	67-56-1	480	6	EN 374-3:2003	4	++
メタノール99%	67-56-1	480	6	EN 16523-1:2015	4	++
メタノール99%	67-56-1	480	6	EN 16523-1:2015	4	++
酢酸メチル99%	79-20-9	273	4	ASTM F739	NT	NA
アルキル (C = 1 ~ 16) メチルケトン99%	78-93-3	480	6	EN 16523-1:2015	4	++
メタクリル酸メチル95%	80-62-6	NT	NT		4	NA
メタクリル酸メチル99%	80-62-6	89	3	EN 374-3:2003	4	++
メタクリル酸アルキル (C = 2 ~ 20) 99%	97-88-1	90	3	ASTM F739	NT	NA
ヘプタン99%	142-82-5	15	1	EN 374-3:2003	1	-
N, N - ジメチルアセトアミド30%	127-19-5	480	6	ASTM F739	NT	NA
N, N - ジメチルアセトアミド99%	127-19-5	480	6	ASTM F739	NT	NA
重質ナフサ	64742-48-9	45	2	EN 374-3:2003	2	=
硝酸10%	7697-37-2	480	6	EN 374-3:2003	4	++
硝酸20%	7697-37-2	480	6	EN 374-3:2003	4	++
硝酸40%	7697-37-2	480	6	EN 374-3:2003	4	++
硝酸50%	7697-37-2	480	6	EN 374-3:2003	4	++
硝酸65%	7697-37-2	480	6	EN 16523-1:2015	4	++
硝酸68%	7697-37-2	480	6	EN 374-3:2003	4	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.
- Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended**, these gloves are deemed unsuitable for work with this chemical.

NT: Not tested

NA: "Not applicable" because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time



Butoflex 650

薬品名 濃度%	CAS #	透過正結果 (分)	Permeation level	Standard	Degradatio level	Rating
リン酸75%	7664-38-2	480	6	EN 374-3:2003	4	++
リン酸85%	7664-38-2	480	6	EN 374-3:2003	4	++
水酸化ナトリウム20%	1310-73-2	480	6	EN 374-3:2003	4	++
水酸化ナトリウム40%	1310-73-2	480	6	EN 374-3:2003	4	++
水酸化ナトリウム50%	1310-73-2	480	6	EN 374-3:2003	4	++
スチレン99%	100-42-5	19	1	EN 374-3:2003	2	=
硫酸10%	7664-93-9	480	6	EN 374-3:2003	NT	NA
硫酸40%	7664-93-9	480	6	EN 374-3:2003	NT	NA
硫酸50%	7664-93-9	480	6	EN 374-3:2003	NT	NA
硫酸96%	7664-93-9	480	6	EN 16523-1:2015	4	++
テトラヒドロフラン99%	109-99-9	13	1	EN 374-3:2003	1	-
トルエン99%	108-88-3	7	0	EN 374-3:2003	1	-
酢酸ビニル99%	108-05-4	212	4	ASTM F739	NT	NA
キシレン99%	1330-20-7	10	0	EN 374-3:2003	1	-

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.
- Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended**, these gloves are deemed unsuitable for work with this chemical.

NT: Not tested

NA: "Not applicable" because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time



Butoflex 650

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
2-Propanol (Isopropanol) 99%	67-63-0	480	6	EN 374-3:2003	4	++
Acetic acid 10%	64-19-7	480	6	EN 374-3:2003	4	++
Acetic acid 50%	64-19-7	480	6	EN 374-3:2003	4	++
Acetic acid 99%	64-19-7	480	6	EN 16523-1:2015	4	++
Acetone 99%	67-64-1	480	6	EN 16523-1:2015	4	++
Acetonitrile 99%	75-05-8	480	6	EN 16523-1:2015	4	++
Acrylic acid 95%	79-10-7	480	6	EN 374-3:2003	4	++
Acrylic acid 99%	79-10-7	480	6	EN 374-3:2003	4	++
Ammonia 99%	7664-41-7	480	6	EN 374-3:2003	NT	NA
Ammonium hydroxide solution 25%	1336-21-6	480	6	EN 16523-1:2015	4	++
Carbon disulfide 99%	75-15-0	1	0	EN 374-3:2003	4	=
Chlorine 100%	7782-50-5	480	6	EN 374-3:2003	NT	NA
Dichloromethane (Methylene Chloride) 99%	75-09-2	12	1	EN 374-3:2003	2	=
Diethylamine 98%	109-89-7	11	1	EN 374-3:2003	2	=
Dimethylformamide 99%	68-12-2	480	6	EN 374-3:2003	4	++
Ethanol 95%	64-17-5	480	6	EN 374-3:2003	4	++
Ethyl acetate 99%	141-78-6	158	4	EN 16523-1:2015	4	++
Ethyl methacrylate 99%	97-63-2	81	3	ASTM F739	NT	NA
Formaldehyde 37%	50-00-0	480	6	EN 16523-1:2015	NT	NA
Formic Acid 100%	64-18-6	NT	NT		4	NA
Formic Acid 96%	64-18-6	NT	NT		4	NA
Hydrochloric acid 10%	7647-01-0	NT	NT		4	NA
Hydrochloric acid 35%	7647-01-0	NT	NT		4	NA
Hydrochloric acid 37%	7647-01-0	NT	NT		4	NA
Hydrofluoric Acid 10%	7664-39-3	480	6	EN 374-3:2003	NT	NA
Hydrofluoric Acid 40%	7664-39-3	480	6	EN 16523-1:2015	NT	NA

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

■ Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.

■ Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.

■ **Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.

■ **Not recommended**, these gloves are deemed unsuitable for work with this chemical.

□ NT: Not tested

■ NA: "Not applicable" because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time



Butoflex 650

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
Hydrofluoric Acid 49%	7664-39-3	480	6	EN 374-3:2003	NT	NA
Hydrogen bromide 100%	10035-10-6	NT	NT		4	NA
Hydrogen bromide 47%	10035-10-6	NT	NT		4	NA
Hydrogen chloride 99%	7647-01-0	480	6	EN 374-3:2003	NT	NA
Hydrogen fluoride Anhydrous 100% Liq.	7664-39-3	4	0	EN 16523-1:2015	NT	NA
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	NT	NA
Isobutyl methacrylate 97%	97-86-9	105	3	ASTM F739	NT	NA
Methanol 85%	67-56-1	480	6	EN 374-3:2003	4	++
Methanol 99%	67-56-1	480	6	EN 16523-1:2015	4	++
Methanol 99%	67-56-1	480	6	EN 16523-1:2015	4	++
Methyl acetate 99%	79-20-9	273	4	ASTM F739	NT	NA
Methyl Ethyl Ketone (2-Butanone) 99%	78-93-3	480	6	EN 16523-1:2015	4	++
Methyl methacrylate 95%	80-62-6	NT	NT		4	NA
Methyl methacrylate 99%	80-62-6	89	3	EN 374-3:2003	4	++
n-butyl methacrylate 99%	97-88-1	90	3	ASTM F739	NT	NA
n-Heptane 99%	142-82-5	15	1	EN 374-3:2003	1	-
N-N dimethyl acetamide 30%	127-19-5	480	6	ASTM F739	NT	NA
N-N dimethyl acetamide 99%	127-19-5	480	6	ASTM F739	NT	NA
Naphtha, Hydrotreated Heavy mixture	64742-48-9	45	2	EN 374-3:2003	2	=
Nitric acid 10%	7697-37-2	480	6	EN 374-3:2003	4	++
Nitric acid 20%	7697-37-2	480	6	EN 374-3:2003	4	++
Nitric acid 40%	7697-37-2	480	6	EN 374-3:2003	4	++
Nitric acid 50%	7697-37-2	480	6	EN 374-3:2003	4	++
Nitric acid 65%	7697-37-2	480	6	EN 16523-1:2015	4	++
Nitric acid 68%	7697-37-2	480	6	EN 374-3:2003	4	++

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.
- Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- Not recommended**, these gloves are deemed unsuitable for work with this chemical.

NT: Not tested

NA: "Not applicable" because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time

Butoflex 650

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
Phosphoric acid 75%	7664-38-2	480	6	EN 374-3:2003	4	++
Phosphoric acid 85%	7664-38-2	480	6	EN 374-3:2003	4	++
Sodium hydroxide 20%	1310-73-2	480	6	EN 374-3:2003	4	++
Sodium hydroxide 40%	1310-73-2	480	6	EN 374-3:2003	4	++
Sodium hydroxide 50%	1310-73-2	480	6	EN 374-3:2003	4	++
Styrene 99%	100-42-5	19	1	EN 374-3:2003	2	=
Sulfuric acid 10%	7664-93-9	480	6	EN 374-3:2003	NT	NA
Sulfuric acid 40%	7664-93-9	480	6	EN 374-3:2003	NT	NA
Sulfuric acid 50%	7664-93-9	480	6	EN 374-3:2003	NT	NA
Sulfuric acid 96%	7664-93-9	480	6	EN 16523-1:2015	4	++
Tetrahydrofuran 99%	109-99-9	13	1	EN 374-3:2003	1	-
Toluene 99%	108-88-3	7	0	EN 374-3:2003	1	-
Vinyl acetate 99%	108-05-4	212	4	ASTM F739	NT	NA
Xylene 99%	1330-20-7	10	0	EN 374-3:2003	1	-

*not normalized result

OVERALL CHEMICAL PROTECTION RATING

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.
- **Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- **Not recommended**, these gloves are deemed unsuitable for work with this chemical.

 NT: Not tested

 NA: "Not applicable" because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time

薬品名 濃度%	透過止結果 (分)
プロピルアルコール99%	
アセトン99%	
水酸化アンモニウム水29%	
ベンゼン99%	
モノブロモベンゼン99%	
ホルムアルデヒド37%	
塩酸35%	
塩酸37%	
フッ化水素酸49%	
石油留分又は残油の水素化精製又は分 解により得られる粗ろう	
灯油99%	
メタノール99%	
ブタノール99%	
N－ビニル－2－ピロリドン	
石油エーテル68%	
硝酸85%	
フェノール85%	
リン酸20%	
水酸化ナトリウム20%	
水酸化ナトリウム40%	
水酸化ナトリウム50%	
硫酸96%	
天然ガソリン	