KEMBLOK™

HIGH PERFORMANCE
CHEMICAL PROTECTIVE GLOVES

WWW.KEMBLOK.COM

KEMBLOK™

Manufactured using a seven-layer chemical barrier laminate material, Kemblok™ gloves provide excellent protection against a wide range of chemicals, viruses and micro-organisms.

- Protection against chemicals and micro-organisms to EN ISO 374-1:2016
- Can be worn as a liner under heavier gloves providing mechanical protection
- Lightweight & comfortable
- Compatible with the PermaSURE® toxicity modelling smartphone app which calculates safe working times for over 4,000 chemicals
- Ergonomic ambidextrous design
- Working temperature -40°C to 70°C
- Silicone and latex free
- REACH compliant

CERTIFICATION

- **EN ISO 374-1:2016 - Type A**
  Protective gloves against chemicals & micro-organisms. Permeation Level 6 with reagents A, D, E, G, H & L
- **EN ISO 374-5:2016**
  Protective gloves against chemicals & micro-organisms. With EN ISO 374-2:2014 AQL Performance Level 3 including Viral Penetration

ADDITIONAL TESTING

- **EN 420:2003+A1:2009**
  Clause 5.2, Finger Dexterity Level 5

APPLICATIONS

- Transferring chemicals and loading process equipment
- Filling, blending & charging of raw materials
- Opening & draining pumps, valves or lines
- Handling application and cleaning tools
- Chemical Testing
- Degreasing
- Emergency response
- Spills & leakages

SIZING

	Small	Medium	Large
EU Size	11-12	13-14	14-15
US Size	12-13	14-15	15-16

SUPPLY

Kemblok™ gloves are supplied in sealed bags of 10 pairs.

PERMASURE®
TOXICITY MODELLER

PermaSURE® is a new software tool designed to help answer one simple question: 'How long can I work safely in this environment?'

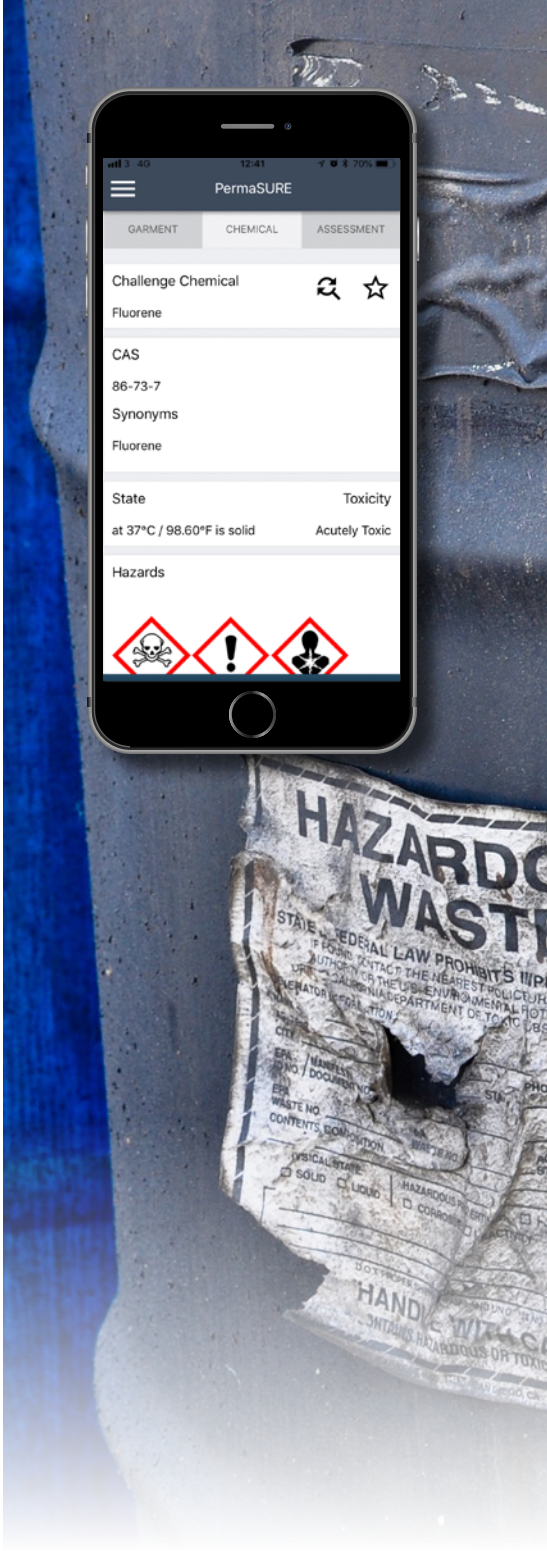
PermaSURE® is a toxicity modelling app for Respirex™ Kemblok™ gloves and chemical protective suits made from Chemprotex™ fabrics. Using the latest modelling techniques, the PermaSURE® app calculates your safe working time based on the chemical you are working with, the PPE you are using and the working temperature.

The permeation data for chemical protective fabrics is an important starting point in the decision process of what suit material to choose for working with a given chemical, and provides an excellent means to compare different fabrics, but permeation data alone does not tell you how long you are safe to work, and if used incorrectly can actually give a false sense of security to chemical workers.

The advantages of PermaSURE® are:

- It accounts for actual glove or suit temperature. Permeation is measured in a laboratory at 23°C, but in use the temperature of the suit fabric may be much higher or lower. As a rough rule of thumb the rate of a chemical process doubles with every 10°C rise in temperature; PermaSURE® models this accurately. Whether the suit is as warm as the wearer (body temperature is typically 37°C), or as cold as the surroundings (potentially below 0°C in winter), PermaSURE® gives reliable information about permeation resistance under real operating conditions.

- Breakthrough measures the time taken to reach an arbitrarily–specified rate of permeation through the suit fabric (typically 1.0µg/cm^2/min), but by the time permeation reaches this rate how much chemical has already permeated through to the wearer? PermaSURE® models low-level, but potentially-significant, permeation before breakthrough.
- PermaSURE® takes account of the toxicity of the substance your PPE is exposed to when calculating a safe working time, thereby discriminating between harmful, toxic and carcinogenic substances, ensuring that the degree of protection matches the potential hazard to the wearer. It also provides clear hazard information.



CHEMICAL WARFARE AGENT PROTECTION

Kemblok™ gloves have been tested in accordance with FINABEL O.7.C methods at the respected Proqares laboratory for resistance to permeation by chemical warfare agents against the following agents at 37°C:

Agent	Breakthrough time (hours)
Mustard agent (HD)	>48
Sarin (GB)	>48
Soman (GD)	>48
VX	>48

For chemical permeation data see next page.

KEMBLOK™ - CHEMICAL PERMEATION DATA

Chemical Name	State	EN 374-1 Code	CAS Number	Breakthrough EN374-3 (min.)	EN Class
acetaldehyde	L		75-07-0	>480	6
acetic acid (30%)	L		64-19-7	>480	6
acetic acid (glacial)	L	N	64-19-7	>480	6
acetic anhydride	L		108-24-7	>480	6
acetone	**L**	**B**	**67-64-1**	**>480**	**6**
acetonitrile	**L**	**C**	**75-05-8**	**>480**	**6**
acetophenone	L		98-86-2	>480	6
acrylamide (50%)	L		79-06-1	>480	6
acrylic acid	L		79-10-7	>480	6
acrylonitrile	L		107-13-1	>480	6
allyl alcohol	L		107-18-6	>480	6
ammonia	**G**		**7664-41-7**	**>480**	**6**
ammonium hydroxide (35% NH_3 in water)	L	O	1336-21-6	>480	6
amyl acetate-n	L		628-63-7	>480	6
aniline	L		62-53-3	>480	6
aviation fuel	L		-	>480	6
benzene	L		71-43-2	>402	5
benzonitrile	L		100-47-0	>480	6
benzoyl chloride	L		98-88-4	>480	6
benzyl alcohol	L		100-51-6	>480	6
benzyl chloride	L		100-44-7	>480	6
bromine	L		7726-95-6	8	0
butadiene 1,3	G		106-99-0	>480	6
butane	G		106-97-8	>480	6
butanol n-	L		71-36-3	>480	6
Butyl aldehyde	L		123-72-8	>480	6
Butyl ether n-	L		142-96-1	>480	6
carbon disulphide	**L**	**E**	**75-15-0**	**>480**	**6**
chlorine	**G**		**7782-50-5**	**>480**	**6**
chloroacetic acid (68%)	L		79-11-8	>480	6
chlorobenzene	L		108-90-7	389	5
chloroethanol 2-	L		107-07-3	>480	6
chloroform	L		67-66-3	95	3
cresol m-	L		108-39-4	>480	6

Chemical Name	State	EN 374-1 Code	CAS Number	Breakthrough EN374-3 (min.)	EN Class
cyclohexane	L		110-82-7	>480	6
cyclohexanone	L		108-94-1	>480	6
dichlorodimethylsilane	L		75-78-5	>480	6
dichloromethane	**L**	**D**	**75-09-2**	**>480**	**6**
diesel fuel	L		-	>480	6
diethylamine	**L**	**G**	**109-89-7**	**>480**	**6**
di(2-ethylhexyl)phthalate	L		117-81-7	>480	6
dimethylacetamide N,N	L		127-19-5	>480	6
dimethylformamide N,N	L		4472-41-7	>480	6
dimethyl sulphate	L		77-78-1	>480	6
dimethyl sulphide	L		75-18-3	84	3
dimethyl sulphoxide	L		67-68-5	>480	6
dioxane 1,4-	L		123-91-1	>480	6
epichlorohydrin	L		106-89-8	>480	6
ethanol	L		64-17-5	>480	6
ethanolamine	L		141-43-5	>480	6
ethyl acetate	**L**	**I**	**141-78-6**	**>480**	**6**
ethyl cellosolve acetate	L		111-15-9	>480	6
ethylene diamine	L		107-15-3	>480	6
ethylene dibromide	L		106-93-4	>480	6
ethylene glycol	L		107-21-1	>480	6
ethylene oxide	G		75-21-8	>480	6
formaldehyde (37%)	L	T	50-00-0	>480	6
formic acid (96%)	L		64-18-6	>480	6
furaldehyde 2-	L		98-01-1	>480	6
glutaraldehyde (5%)	L		111-30-8	>480	6
heptane	**L**	**J**	**142-82-5**	**>480**	**6**
hexane	L		110-54-3	>480	6
hydrazine monohydrate	L		7803-57-8	>480	6
hydrochloric acid (37%)	L		7647-01-0	>480	6
hydrofluoric acid (48%)	L	S	7664-39-3	>480	6
hydrofluoric acid (73%)	L		7664-39-3	>480	6
hydrogen chloride	**G**		**7647-01-0**	**>480**	**6**
hydrogen fluoride (anhydrous gas)	G		7664-39-3	304	5
hydrogen fluoride (anhydrous liquid)	L		7664-39-3	228	4
hydrogen peroxide (30%)	L	P	7722-84-1	>480	6

Chemical Name	State	EN 374-1 Code	CAS Number	Breakthrough EN374-3 (min.)	EN Class
kerosene	L		8008-20-8	>480	6
mercuric chloride (sat. solution)	L		7487-94-7	>480	6
methacrylic acid	L		79-41-4	>480	6
methanol	**L**	**A**	**67-56-1**	**>480**	**6**
methyl acrylate	L		96-33-3	>480	6
methyl-t-Butyl-ether	L		1634-04-4	>480	6
methyl chloride	G		74-87-3	>480	6
methyl ethyl ketone	L		78-93-3	>480	6
methyl mercaptan	G		74-93-1	>480	6
methyl methacrylate	L		80-62-6	>480	6
methyl vinyl ketone	L		78-94-4	>480	6
methyl -2-pyrrolidone n-	L		872-50-4	>480	6
methylene bromide	L		74-95-3	>480	6
nicotine	L		54-11-5	>480	6
nitric acid (70%)	L	M	7697-37-2	>480	6
nitric acid (>90% fuming)	L		7697-37-2	>480	6
nitrobenzene	L		98-95-3	>480	6
nitromethane (96%)	L		75-52-5	>480	6
oleum (15% free SO_3)	L		8014-95-7	>480	6
perchloric acid	L		7601-90-3	>480	6
petrol, leaded	L		-	>480	6
petrol, unleaded	L		8006-61-9	>480	6
phenol (85%)	L		108-95-2	>480	6
phosphoric acid (85%)	L		7664-38-2	>480	6
phosphorus oxytrichloride	L		10025-87-3	440	5
potassium chromate (sat. solution)	L		7789-00-6	>480	6
propan-2-ol	L		67-63-0	>480	6
propylene oxide 1,2-	L		75-56-9	>480	6
pyridine	L		110-86-1	>480	6
'Roundup' weedkiller	L		-	>480	6
sodium cyanide (45%)	L		143-33-9	>480	6
sodium hydroxide (40%)	**L**	**K**	**1310-73-2**	**>480**	**6**
sodium hypochlorite (12% chlorine)	L		7681-52-9	>480	6
styrene	L		100-42-5	>480	6
sulphur dioxide	G		7446-09-5	>480	6
sulphuric acid (50%)	**L**		**7664-93-9**	**>480**	**6**

Chemical Name	State	EN 374-1 Code	CAS Number	Breakthrough EN374-3 (min.)	EN Class
sulphuric acid (95-98%)	L	L	7664-93-9	>480	6
tetrachloroethylene	L		127-18-4	>480	6
tetrahydrofuran	**L**	**H**	**109-99-9**	**>480**	**6**
toluene	**L**	**F**	**108-88-3**	**>480**	**6**
toluene 2,4-diisocyanate	L		584-84-9	>480	6
toluidine o-	L		95-53-4	>480	6
trichloroacetic acid (80%)	L		650-51-1	>480	6
trichlorobenzene 1,2,4-	L		120-82-1	>480	6
trichloroethylene	L		79-01-6	42	2
trifluoroacetic acid	L		76-05-1	>480	6
triethylamine	L		121-44-8	>480	6
vinyl acetate	L		108-05-4	>480	6
xylene (iso-mix)	L		1330-20-7	>480	6

Chemicals in bold text are the 15 standard test chemicals defined in EN943-2:2002

OPTIONS FOR USE

Kemblok™ gloves can be worn with an outer glove for mechanical protection or increased dexterity.

For greater comfort during prolonged use Kemblok™ can be used with a cotton or silk glove liner.

RESPIREX™

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