

Below protective gloves have been tested in accordance with EN 374-3:2003 "Determination of resistance to permeation by chemicals" and achieve following test results.

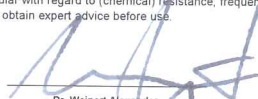
Chemicals (synonyms)	Brand name	Semperguard® Xtension	Semperguard® Xpert	Semperguard® Comfort	Semperguard® Style	Semperguard® Xenon	Semperguard® Xtra Lite	Semperguard® Sapphire blue
	CAS-No. / Spec code	NOF-065RB	NOT-063GB	NOF-047RB	NOT-040BK	NOF-037WH	NOF-035VB	NOF-030VB
Acetic acid (10%)	64-19-7	Level 4	n.t.	Level 5	Level 6	Level 6	Level 6	Level 3
Acetone (2- propanone, methyl ketone)	67-64-1	X	X	X	X	X	X	X
Acetonitrile (cyanomethane, ethyl nitrile)	75-05-8	X	X	X	X	X	X	X
Acryl amide (40%)	79-06-1	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6
Ammonia (Ammoniumhydroxid (25%))	1336-21-6	Level 1	n.t.	Level 1	n.t.	n.t.	n.t.	A
Chlorhexidindigluconat (0,5%)	18472-51-0	n.t.	n.t.	n.t.	n.t.	Level 6	n.t.	n.t.
Chloroform (trichloromethane)	67-66-3	X	X	X	X	X	X	X
Cyclohexanol (Hexalin / at 23°C)	108-93-0	Level 3	Level 4	Level 2	n.t.	n.t.	n.t.	Level 1
Dichloromethane (methylene chloride, Freon 30)	75-09-2	X	X	X	X	X	X	X
Diethyl amine (DEA)	109-89-7	X	X	X	X	X	X	X
Diethyl ether (diethyloxid, ethoxyethane)	60-29-7	X	X	X	X	X	X	X
Dimethylsulfoxide DMSO (deltan, demasorb)	67-68-5	X	X	X	X	X	X	X
Ethanol (20%) (ethyl alcohol)	64-17-5	Level 1	Level 6	A	Level 1	Level 1	Level 1	Level 1
Ethanol (40%) (ethyl alcohol)	64-17-5	A	Level 1	A	A	A	A	n.t.
Ethanol (70%) (ethyl alcohol)	64-17-5	A	Level 1	A	A	A	A	n.t.
Ethanol (80%) (ethyl alcohol)	64-17-5	A	Level 1	A	A	A	A	n.t.
Ethanol p.a. (ethyl alcohol)	64-17-5	A	n.t.	A	A	A	A	n.t.
Ethidium bromide (1%) (homidium bromide)	1239-45-8	Level 6	Level 6	Level 6	Level 5	Level 5	Level 6	Level 6
Ethyl acetate (Aceto acid ether)	141-78-6	X	A	X	X	X	X	n.t.
Formaldehyde (37%) with Methanol (10%) (formalin, methyl aldehyde)	50-00-0	Level 5	Level 6	Level 6	Level 1	Level 1	Level 1	Level 3
Gasoline (Petrol, heavy, bp 150 – 190°C)	8032-32-4	X	X	X	X	X	X	X
Glutaraldehyde (5%) (1,3-diformylpropane; Glutaral)	111-30-8	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6
Heptane – n+3434:40	142-82-5	X	A	A	X	X	X	n.t.
Hexane – n	110-54-3	X	A	A	X	X	X	n.t.
Hydrochloric acid (10%) (muriatic acid, chlorohydric acid)	7647-01-0	n.t.	n.t.	n.t.	Level 5	Level 6	Level 6	Level 6
Hydrochloric acid (36%) (muriatic acid, chlorohydric acid)	7647-01-0	n.t.	Level 3	Level 3	A	A	A	n.t.
Hydrofluoric acid (40%) (2-propanol, IPA)	7664-39-3	X	Level 1	X	n.t.	n.t.	n.t.	n.t.
Isopropyl alcohol (40%) (2-propanol, IPA)	67-63-0	Level 1	Level 1	A	Level 1	Level 1	Level 1	n.t.
Isopropyl alcohol (70%) (2-propanol, IPA)	67-63-0	Level 1	Level 1	A	Level 1	Level 1	Level 1	n.t.
Isopropyl alcohol p.a.	67-63-0	Level 1	Level 1	A	A	A	A	A
Methanol (5%) (methyl alcohol)	67-56-1	Level 6	n.t.	Level 6	n.t.	n.t.	n.t.	n.t.
Methanol p.a. (methyl alcohol)	67-56-1	A	A	A	X	X	X	X
Ninhydrine 0.2%	485-47-2	n.t.	Level 6	Level 6	n.t.	n.t.	Level 6	n.t.
Nitric acid (10%)	7697-37-2	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6
Nitric acid (36%)	7697-37-2	Level 3	Level 4	Level 3	A	A	Level 6	n.t.
Nitric acid (50%)	7697-37-2	n.t.	Level 4	n.t.	A	A	A	n.t.
Phenol (10%)	108-95-2	X	Level 2	X	X	X	X	X
Phenol (80%)	108-95-2	X	Level 2	X	X	X	X	X
Phosphoric acid (10%) (orthophosphoric acid)	7664-38-2	Level 6	Level 6	Level 6	n.t.	n.t.	Level 6	n.t.
Phosphoric acid (30%) (orthophosphoric acid)	7664-38-2	Level 6	n.t.	Level 6	Level 6	Level 6	Level 6	Level 6
Phosphoric acid (85%) (orthophosphoric acid)	7664-38-2	n.t.	n.t.	n.t.	n.t.	n.t.	Level 6	n.t.
Potassium hydroxide (30%) (caustic potash, lye)	1310-58-3	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6	Level 5
Sodium hydroxide (30%)(caustic soda, lye, white caustic)	1310-73-2	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6
Sodium hydroxide (40%)(caustic soda, lye, white caustic)	1310-73-2	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6	Level 6
Sulphuric acid (96%) (vitriol)	7664-93-9	Level 1	Level 1	A	n.t.	A	n.t.	n.t.

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	CAS-No. / Spec code	NOF-065RB	NOT-063GB	NOF-047RB	NOT-040BK	NOF-037WH	NOF-035VB	NOF-030VB
Toluene (methylbenzol, phenylmethan, toluol)	108-88-3	X	X	X	X	X	X	X
Trichlorethane (methyltrichloromethane)	71-55-6	X	X	X	X	X	X	X
Xylene (xyloil, dimethylbenzene)	95-47-6	X	X	X	X	X	X	X

X	not recommended	Level 3	for contact > 60 min.
A	splash protection only – change glove immediately after contact!	Level 4	for contact > 120 min.
Level 1	for short contact > 10 min	Level 5	for contact > 240 min.
Level 2	for contact >30 min.	Level 6	for longer contact > 480 min.

**IMPORTANT NOTE:** The latest chemical resistance list can be found at [www.sempermed.com](http://www.sempermed.com). Please note that the product characteristics are directly dependent on the conditions of use and on the purity of the chemical substances concerned. The chemical resistance has been assessed under laboratory conditions from samples taken from the palm only and does not reflect the actual duration of protection in the workplace. When working with materials that are harmful to the skin, please always inspect the glove for any holes or tears prior to use. In principle, tests and certificates may only be regarded as general indications and do not exempt the user from the responsibility of making sure that the glove affords the protection requirements for the intended purpose prior to use. The chemical resistance recommendations do not form part of the specifications.

**CAUTION:** Failure to observe this information, in particular with regard to (chemical) resistance, frequency of use and tolerability of the gloves, can result in personal injury and/or material damage. Semperit does not accept any liability for incorrect use of the gloves. In case of doubt, obtain expert advice before use.

  
 Dr. Weibert Alexander  
 R&D Senior Chemist

  
 Lisa Stagl  
 Technical Product Manager

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