

## Recommendation on Chemical Resistance – Cytostatics

Sempermed gloves for single use have been tested in accordance with ASTM D6978 "Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs" by independent accredited test institutes.

<b>Classification:</b>
Not suitable
Suitable if changed before permeation breakthrough
Suitable for longer surgeries*

<b>Permeation Rate:</b>
The tests were performed according to ASTM D6978

**Caution: Damaged or swelling gloves shall be changed immediately!**

\*For reason of precaution it is recommended to change gloves after 2 hours!

**TEST RESULTS by:**

- ARDL Akron Rubber Development Laboratory, Ohio, USA

**Breakthrough Detection Time (BDT) = Minutes (min)\***

Chemotherapy Drug	mg/ml	semperguard® green	semperguard® Xenon	semperguard® cobalt blue	semperguard® sapphire blue	semperguard® Xtra lite	semperguard® comfort	semperguard® Xtension (300)	Semperclean MC
		NCF-035GR	NCF-035WH	NOF-030CO	NOF-030VB	NOF-035	NOF-047	NOF-065RB	LFM-110NA
		Nitrile – NBR	Nitrile – NBR	Nitrile – NBR	Nitrile – NBR	Nitrile – NBR	Nitrile – NBR	Nitrile – NBR	Latex – NR
		BDT	BDT	BDT	BDT	BDT	BDT	BDT	BDT
5-Fluorouracil	50,0	n/a	> 240	> 240	> 240	> 240	> 240	> 240	> 240
Carmustine (BiCNU)	3,3	n/a	14	25	2	13	46	23	12
Cisplatin	1,0	n/a	> 240	> 240	> 240	> 240	> 240	> 240	> 240
Cyclophosphamide (Cytoxan)	20,0	n/a	> 240	> 240	> 240	> 240	> 240	> 240	> 240
Dacarbazine (DTIC)	10,0	n/a	> 240	> 240	> 240	n/a	> 240	> 240	> 240
Doxorubicin HCl	2,0	n/a	> 240	> 240	> 240	> 240	> 240	> 240	> 240
Epirubicin	2,0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Etoposide	20,0	n/a	> 240	> 240	> 240	> 240	> 240	> 240	> 240
Methotrexate (Amethopterin Hydrate)	25,0	n/a	> 240	> 240	> 240	n/a	> 240	> 240	> 240
Mitomycin C	0,5	n/a	> 240	> 240	> 240	n/a	> 240	> 240	> 240
Mitoxantrone HCl	2,0	n/a	> 240	> 240	> 240	n/a	> 240	> 240	> 240
Oxaliplatin	5,0	n/a	n/a	n/a	> 240	n/a	> 240	> 240	> 240
Paclitaxel (Taxol)	6,0	n/a	> 240	> 240	> 240	> 240	> 240	> 240	> 240
Thio-Tepa	10,0	n/a	13	37	1	15	38	11	13
Vincristine sulfate	1,0	n/a	> 240	> 240	> 240	n/a	> 240	> 240	> 240

\*Concentration: according instruction leaflet

n/a ..... not available

**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 and cannot reflect all actual conditions. 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. Sempermed does not accept any liability for incorrect use of the gloves. In case of doubt, obtain expert advice before use.

This document was issued electronically and is therefore valid without signature and has a validity of up to one year.

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