

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.

| Classification: |
|--|
| Not suitable |
| Suitable if changed before permeation breakthrough |
| Suitable for longer surgeries* |

| Permeation Rate: |
|--|
| 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
- ProQares, Rijswijk, NETHERLANDS

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

| Chemotherapy Drug | mg/ml | Sempermed Supreme Green | Sempermed Supreme Plus | Sempermed Supreme | Sempermed Syntegra Green | Sempermed Syntegra IR | Sempermed Syntegra UV |
|--------------------------------------|-------|-------------------------|------------------------|-------------------|--------------------------|-----------------------|-----------------------|
| | | LFM-091GR | LFG-110NA | LFM-110NA | PFM-116GR | PFM-116SC | PUM-118WH |
| | | Latex - NR | Latex-NR | Latex - NR | Polyisopren | Polyisopren | Polyisopren |
| | | BDT | BDT | BDT | BDT | BDT | BDT |
| 5-Fluorouracil | 50,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Bleomycin sulfate | 15,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Carboplatin | 10,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Carmustine (BiCNU) | 3,3 | 13 | 13 | 12 | 15 | 16 | 16 |
| Cisplatin | 1,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Cyclophosphamide (Cytoxan) | 20,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Cytarabine | 100,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Dacarbazine (DTIC) | 10,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Daunorubicin HCl | 5,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Doxorubicin HCl | 2,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Docetaxel | 10,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Epirubicin | 2,0 | n/a | n/a | n/a | n/a | n/a | > 240 |
| Etoposide | 20,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Gemcitabine HCl | 38,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Idarubicin HCl | 1,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Irinotecan HCl | 20,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Ifosfamid | 50,0 | > 240 | 126 | > 240 | 231 | > 240 | n/a |
| Methotrexate (Amethopterine Hydrate) | 25,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Mitomycin C | 0,5 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Mitoxantrone HCl | 2,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Oxaliplatin | 5,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Paclitaxel (Taxol) | 6,0 | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Thio-Tepa | 10,0 | 11 | 23 | 13 | 24 | 26 | 27 |

| Chemotherapy Drug | mg/ml | Sempermed Supreme Green | Sempermed Supreme Plus | Sempermed Supreme | Sempermed Syntegra Green | Sempermed Syntegra IR | Sempermed Syntegra UV |
|----------------------|-------|-------------------------|------------------------|-------------------|--------------------------|-----------------------|-----------------------|
| | | LFM-091GR | LFG-110NA | LFM-110NA | PFM-116GR | PFM-116SC | PUM-118WH |
| | | Latex - NR | Latex-NR | Latex - NR | Polyisopren | Polyisopren | Polyisopren |
| | | BDT | BDT | BDT | BDT | BDT | BDT |
| Topotecan HCl | 1,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Vinblastin sulfate | 1,0 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Vinorelbine tartrate | 0,1 | > 240 | > 240 | > 240 | > 240 | > 240 | n/a |
| Vincristine sulfate | 1,0 | > 240 | > 240 | > 240 | > 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. 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. Semperit 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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