



Medline

FitGuard®
Powder-Free Nitrile
Examination Gloves

FG2502 series

Permeation Resistance to
Chemotherapy Drugs

Representative Drugs Tested

The chemotherapy gloves used in testing per the ASTM D6978 test method incorporate the different classes of clinical drugs. This class representation is important since it would be burdensome to test against every chemotherapy drug in the market. The ASTM test methods require that a minimum of nine currently used drugs are tested.

The clinical drugs selected must include at least the following seven drugs:

- Carmustine
- Cyclophosphamide
- Doxorubicin HCl (Adriamycin)
- Etoposide
- Fluorouracil (Adrucil)
- Paclitaxel (Taxol)
- Thio-Tepa

An additional two clinical drugs can be selected from a list provided by ASTM in the test method. The clinical drugs are all purchased from pharmaceutical drug manufacturers or authorized distributors. Each test drug is prepared using the manufacturer's recommended solvent.

The drug solution is prepared with the recommended solvent and at the highest concentration of the drug to which a healthcare worker might be exposed during handling

Breakthrough Time

The result for each chemo drug is reported at "breakthrough time" or the time it takes for the chemical to permeate from the outer surface of the glove to the inside surface. A higher breakthrough time means better protection. The breakthrough time should be longer than the glove wear time in order to ensure adequate protection.

PERMEATION AND BREAKTHROUGH RESISTANCE MEDICAL EXAM GLOVES

PRODUCT: NITRILE EXAMINATION GLOVES, FG2502 SERIES

Drug Name	Concentration Tested	Breakthrough time in min.
Blenoxane (Bleomycin)	15 mg/ml (15,000 ppm)	>240
Busulfan	6 mg/ml (6,000 ppm)	>240
Carboplatin	10.0 mg/ml (10,000 ppm)	>240
Carmustine (BCNU)	3.3 mg/ml (3,300 ppm)	Not for Use with Carmustine
Cisplatin	1.0 mg/ml (1,000 ppm)	> 240
Cyclophosphamide (Cytosan)	20.0 mg/ml (20,000 ppm)	> 240
Cytarabine Hydrochloride	100 mg/ml (100,000 ppm)	> 240
Dacarbazine (DTIC)	10.0 mg/ml (10,000 ppm)	> 240
Daunorubicin	5 mg/ml (5,000 ppm)	>240
Docetaxel	10.0 mg/ml (10,000 ppm)	>240
Doxorubicin Hydrochloride	2.0 mg/ml (2,000 ppm)	> 240
Epirubicin (Ellence)	2.0 mg/ml (2,000 ppm)	>240
Etoposide (Toposar)	20.0 mg/ml (20,000 ppm)	> 240
Fludarabine	25 mg/ml (25,000 ppm)	>240
Fluorouracil	50.0 mg/ml (50,000 ppm)	> 240
Gemcitabine (Gemzar)	38 mg/ml (38,000 ppm)	>240
Idarubicin	1 mg/ml (1,000 ppm)	>240
Ifosfamide (IFEX)	50.0 mg/ml (50,000 ppm)	> 240
Irinotecan	20.0 mg/ml (20,000 ppm)	>240
Mechlorethamine HCl	1.0 mg/ml (1,000 ppm)	>240
Melphalan	5 mg/ml (5,000 ppm)	>240
Methotrexate	50 mg/ml (50,000 ppm)	> 240
Methotrexate	25 mg/ml (25,000 ppm)	> 240
Mitomycin C	0.5 mg/ml (500 ppm)	> 240
Mitoxantrone	2.0 mg/ml (2,000 ppm)	> 240
Paclitaxel (Taxol)	6.0 mg/ml (6,000 ppm)	> 240
Rituximab	10 mg/ml (10,000 ppm)	>240
Thio-Tepa	10.0 mg/ml (10,000 ppm)	Not for Use with Thiotepa
Trisenox	1 mg/ml (1000 ppm)	>240
Vincristine Sulfate (Oncovin)	1.0 mg/ml (1,000 ppm)	> 240

Warning: Not for Use with Carmustine and Thiotepa.

****Meets USP 800 Personal Protection Equipment requirement for use of chemotherapy gloves when handling hazardous drugs when used in accordance to the guidelines set forth in the USP 800 chapter.**