



Medline

*Aloetouch* 12”®  
Powder-Free Nitrile  
Examination Gloves

MDS195185 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)
- ThioTEPA

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 WITH ALOE, MDS195185 SERIES**

<b>DRUG NAME</b>	<b>CONCENTRATION TESTED</b>	<b>Breakthrough time in min.</b>
Blenoxane	15 mg/ml (15,000 ppm)	>240
Bortezomib (Velcade)	1 mg/ml (1,000 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)	47.2
Cetuximab (Erbix)	2.0 mg/ml (2,000)	>240
Cisplatin	1.0 mg/ml (1,000 ppm)	>240
Cyclophosphamide (Cytosan)	20.0 mg/ml (20,000 ppm)	>240
Cytarabine	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
5-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	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	25 mg/ml (25,000 ppm)	>240
Mitomycin C	0.5 mg/ml (500 ppm)	>240
Mitoxantrone	2 mg/ml (2,000 ppm)	>240
Oxaliplatin	5 mg/ml (5,000 ppm)	>240
Paclitaxel (Taxol)	6.0 mg/ml (6,000 ppm)	>240
Pemetrexed	25.0 mg/ml (25,000 ppm)	>240
Raltitrexed	0.5 mg/ml (500 ppm)	>240
Rituximab	10 mg/ml (10,000 ppm)	>240
Thio-Tepa	10.0 mg/ml (10,000 ppm)	119.3
Trisenox	0.1 mg/ml (100 ppm)	>240
Vidaza (5-Azacytidine)	25 mg/ml (25,000 ppm)	>240
Vinblastine	1 mg/ml (1,000 ppm)	>240
Vincristine Sulfate (Oncovin)	1.0 mg/ml (1,000 ppm)	>240
Vinorelbine	10 mg/ml (10,000 ppm)	>240

Caution: Testing showed a minimum breakthrough time of 47.2 minutes with Carmustine.