

**RECOMMENDATION ON CHEMICAL RESISTANCE TO CYTOSTATICS**

SHOWA single use NITRILE gloves have been tested according to the test method of the norm ASTM D6978-05 "**Standard Practice for Resistance of medical gloves to permeation by chemotherapy drugs**" by independent accredited institute.

CHEMOTHERAPY DRUG & CONCENTRATION	SHOWA	SHOWA	SHOWA	SHOWA
	7540 / 7545 / 7555 / 7580 / 7585	7570	7565	7595
	BDT	BDT	BDT	BDT
Blenoxane, 15,0 mg/ml (15.000 ppm)	>240	>240	>240	>240
Busulfan, 6,0 mg/ml (6.000 ppm)	>240	>240	>240	>240
Carmustine (BCNU), 3,3 mg/ml (3.300 ppm)	47.9	38.8	47.9	47.9
Cisplatin, 1,0 mg/ml (1.000 ppm)	>240	>240	>240	>240
Cyclophosphamide (Cytosan), 20,0 mg/ml (20.000 ppm)	>240	>240	>240	>240
Cytarabine, 100,0 mg/ml (100.000 ppm)	>240	>240	>240	>240
Dacarbazine (DTIC), 10,0 mg/ml (10.000 ppm)	>240	>240	>240	>240
Daunorubicin, 5 mg/ml (5.000 ppm)	>240	>240	>240	>240
Docetaxel, 10,0 mg/ml (10.000 ppm)	>240	>240	>240	>240
Doxorubicin Hydrochloride, 2,0 mg/ml (2.000 ppm)	>240	>240	>240	>240
Ellence, 2,0 mg/ml (2.000 ppm)	>240	>240	>240	>240
Etoposide (Toposar), 20,0 mg/ml (20.000 ppm)	>240	>240	>240	>240
Fludarabine, 25,0 mg/ml (25.000 ppm)	>240	>240	>240	>240
Fluorouracil, 50,0 mg/ml (50.000 ppm)	>240	>240	>240	>240
Gemcitabine (Gemzar), 38,0 mg/ml (38.000 ppm)	>240	>240	>240	>240
Idarubicin, 1,0 mg/ml (1.000 ppm)	>240	>240	>240	>240
Ifosfamide, 50,0 mg/ml (50.000 ppm)	>240	>240	>240	>240
Irinotecan, 20,0 mg/ml (20.000 ppm)	>240	>240	>240	>240
Mechlorethamine HCl, 1,0 mg/ml (1.000 ppm)	>240	>240	>240	>240
Melphalan, 5,0 mg/ml (5.000 ppm)	>240	>240	>240	>240
Methotrexate, 25,0 mg/ml (25.000 ppm)	>240	>240	>240	>240
Mitomycin C, 0,5 mg/ml (500 ppm)	>240	>240	>240	>240
Mitoxantrone, 2,0 mg/ml (2.000 ppm)	>240	>240	>240	>240
Paclitaxel (Taxol), 6,0 mg/ml (6.000 ppm)	>240	>240	>240	>240
Paraplatin, 10,0 mg/ml (10.000 ppm)	>240	>240	>240	>240
Rituximab, 10,0 mg/ml (10.000 ppm)	>240	>240	>240	>240
Thiotepa, 10,0 mg/ml (10.000 ppm)	58.6	88.9	58.6	58.6
Trisenox, 0,1 mg/ml (100 ppm)	>240	>240	>240	>240
Vincristine Sulfate, 1,0 mg/ml (1.000 ppm)	>240	>240	>240	>240

**BDT:** breakthrough detection time expressed in minutes (min).  
**Tests effected:** at 35°C +/- 2°C by ARDL, Ohio, USA.  
**Caution:** damaged or swelling gloves shall be changed immediately!

By precaution, it's recommended to change the gloves after 2 hours.

**Disclaimer:** SHOWA declares that the above permeation test results are based on test in laboratory under conditions prescribed in the above mentioned norm and so cannot reflect any actual conditions. The present data and recommendation do not discharge the user from his responsibility to make sure that the chosen glove is adapted to his needs in terms of protection. Please check the gloves for any defect before use.

Please contact SHOWA for further information.



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