



## Permeation of selected chemicals

<b>Product:</b>	Peha-soft nitrile guard
<b>Type of product:</b>	qualified as examination glove and as personal protection equipment category III, latex-free, powder-free, non-sterile, extended cuff
<b>Date:</b>	04.04.2017
<b>Ref.:</b>	9422001 / 9422011 / 9422021 / 9422031 / 9422041

Based on permeation of selected chemicals (executed by an external accredited test laboratory using test procedures defined in EN 16523-1 supersedes EN 374 part 3, both are still valid) following typical results for **Peha-soft nitrile guard** can be provided:

Chemical "IUPAC"	CAS Number	Performance level / protection index	Break through time [min]*
Acetic Acid 10 %	64-19-7	5	> 240 minutes
Acetic Acid 99 %	64-19-7	0	< 1 minute
Aceton	67-64-1	0	< 1 minute
Acetonitrile	75-05-8	0	< 1 minute
Ammoniumhydroxid 25 %	1336-21-6	1	> 10 minutes
Benzalkoniumchlorid 10 %	63449-41-2	6	> 480 minutes
Carbon disulphide	75-15-0	0	< 1 minute
Chlorhexidin 4 %	18472-51-0	6	> 480 minutes
Chloroform	67-66-3	0	5 minutes
Cyclohexane	110-82-7	1	> 10 minutes
Cyclohexanol	108-93-0	3	> 60 minutes
Cyclohexanone	108-94-1	0	< 1 minute
Dichloroethane	75-09-2	0	< 1 minute
Ethanol 35 %	64-17-5	2	> 30 minutes
Ethanol 80 %	64-17-5	0	7 minutes
Ethanol 70 %	64-17-5	1	> 10 minutes
Ethidiumbromid 5 %	1239-45-8	6	> 480 minutes
Ethyl Acetate	141-78-6	0	< 1 minute
Formaldehyd 37 %	50-00-0	5	> 240 minutes
Formaldehyd 10 %	50-00-0	6	> 480 minutes
Glutaric Aldehyde 1 %	111-30-8	6	> 480 minutes
Glutaric Aldehyde 10 %	111-30-8	6	> 480 minutes**
Hydrochloric Acid 25 %	7647-01-0	6	> 480 minutes
Hydrogen Peroxide 3 %	7722-84-1	6	> 480 minutes**

\* Hartmann wants to inform that the duration of protection under actual "in-use"-circumstances may vary considerable from these performance levels as the values for the permeation test results are based on tests performed in laboratory under fixed conditions. Before use, please check gloves for physical damage. Recommendation on chemical resistance is not part of the specification.

\*\* No testings against EN16523-1 yet, therefore EN 374 part 3 is still valid



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Hydrogen Peroxide 30 %	7722-84-1	3	> 60 minutes
Isopropanol	67-63-0	1	> 10 minutes
Methanol	67-56-1	0	< 1 minute
Nitric acid 65 %	7697-37-2	0	7 minutes
n-Heptan	142-82-5	1	> 10 minutes
n-Hexan	110-54-3	2	> 30 minutes
N-Methyl-2-pyrrolidone 0,2 %	872-50-4	6	> 480 minutes
N-Methyl-2-pyrrolidone 100 %	872-50-4	0	1 minute
Povidone iodine 10% NEW	25655-41-8	5	> 240 minutes
Sodium Hydroxide 40 %	1310-73-2	6	> 480 minutes
Sulphuric Acid 50 %	7664-93-9	6	> 480 minutes
Sulphuric Acid 96 %	7664-93-9	1	> 10 minutes
Tetrahydrofuran	109-99-9	0	< 1 minute
Toluene	108-88-3	0	5 minutes
Xylene	1330-20-7	0	< 1 minute
1,2-Dichloroethane	107-06-2	0	< 1 minute

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Chemotherapy drugs	Performance level / protection index	Break through time [min]*
Carmustin (BCNU)	4	> 120 minutes**
Cisplatin	6	> 480 minutes **
Cyclophosphamid (Cytoxan)	6	> 480 minutes **
Dacarbazin (DTIC)	6	> 480 minutes **
Doxorubicin Hydrochlorid	6	> 480 minutes **
Epirubicin (Ellence)	6	> 480 minutes **
Etoposid (Toposar)	6	> 480 minutes **
Fluorouracil	6	> 480 minutes **
Ifosfamid	6	> 480 minutes **
Methotrexat	6	> 480 minutes **
Mitomycin C	6	> 480 minutes **
Mitoxantron	6	> 480 minutes **
Paclitaxel (Taxol)	6	> 480 minutes **
Thiotepa	6	> 480 minutes **
Vincristine Sulfate	6	> 480 minutes **

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BODE disinfectants and detergents	Performance level / protection index	Break through time [min]*
Baccalin 5 %	6	> 480 minutes
Baccalin 100 %	6	> 480 minutes
Bacillol AF	0	< 1 minute
Bacillol 30 Foam	2	> 30 minutes
Bodedex Forte 0,5 % NEU	6	> 480 minutes
Bodedex Forte 1 % NEU	6	> 480 minutes
Bomix 1%	6	> 480 minutes
Bomix plus 1%	6	> 480 minutes
Bomix plus 2 % (for the detection of ionic species)	6	> 480 minutes
Bomix plus 2 % (for the detection of organic species)	6	> 480 minutes
Dismofix G 1%	6	> 480 minutes
Dismofix G 100 %	1	> 10 minutes
Dismozon pur 1 %	6	> 480 minutes
Dismozon pur 4 %	6	> 480 minutes
Dismozon pur gesättigt	5	> 240 minutes
Dismozon plus 0,4 % NEU	6	> 480 minutes
Dismozon plus 3,6 % NEU	6	> 480 minutes
Kohrsolin extra 0.5 % (for detection of formaldehyde)	6	> 480 minutes
Kohrsolin extra 0.5 % (for detection of organic species)	6	> 480 minutes
Kohrsolin extra 100 %	4	> 120 minutes
Kohrsolin FF 0,5 %	6	> 480 minutes
Kohrsolin FF 100 %	6	> 480 minutes
Korsolex basic 5 % (for detection of organic species)	6	> 480 minutes
Korsolex basic 100 % (for detection of organic species)	6	> 480 minutes
Korsolex extra 4 % (for detection of formaldehyde)	6	> 480 minutes
Korsolex extra 4% (for detection of organic species)	6	> 480 minutes
Korsolex med AF 1 %	6	> 480 minutes
Korsolex med AF 100 %	6	> 480 minutes
Korsolex plus 3 %	6	> 480 minutes
Mikrobac food 1 %	6	> 480 minutes
Mikrobac food 100 %	6	> 480 minutes
Mikrobac forte 0,5 %	6	> 480 minutes
Mikrobac forte 100 %	6	> 480 minutes
Mikrobac tissues	6	> 480 minutes

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Please consider that the usage of products which are qualified as Personal Protective Equipment (PPE) is mandatory for certain fields of work for proper protection of the user.

Permeation performance level	Break through time [min]*
1	> 10 minutes
2	> 30 minutes
3	> 60 minutes
4	> 120 minutes
5	> 240 minutes
6	> 480 minutes

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