Chemical Breakthrough Times – protection with StarGuard® gloves.




CHEMICALS	COMFORT	PROTECT	SENSITIVE	TOUCH
Acetic Acid (50 %)	25	50	41	5
Acetone	0	0	0	0
Acetonitrile (5 % in Ethanol)	0	3	0	0
Acrylamide (40 %)	>480	>480	>480	>480
Beta-Mercaptoethanol (<100 %)	0	5	2	8
Chloroform (1 % in Ethanol)	1	2	1	1
Cyclohexane (99 %)	10	14	33	0
Dimethylsulfoxide (>99.5 %)	2	5	2	18
Ethanol	0	1	1	0
Ethanol (70 %)	23	43	35	1
Ethidium Bromide (5 %)	>480	>480	>480	>480
Formaldehyde (37 %)	241	>480	121	0
Glutaraldehyde (50 %)	>480	>480	>480	>480
Hydrochloric Acid (36 %)	133	222	222	103
Hydrofluoric Acid (40 %)	17	13	23	2
Hydrogen peroxide (30 %)	31	121	177	121
Iso-Propanol	2	62	5	28
Methanol	16	13	0	0
Methanol at 8% in industrial methylated Spirit	138	>480	-	-
n-Heptane	22	98	14	0
Nitric Acid (65%)	-	-	-	44

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Chemical Breakthrough Times – protection with StarGuard® gloves.




CHEMICALS	COMFORT	PROTECT	SENSITIVE	TOUCH
Nitric Acid (50 %)	21	66	9	-
Phenol (0.1 %)	188	292	>480	1
Phenol (50 % in Ethanol)	0	0	1	1
Silver Nitrate 0.171 N	>480	>480	>480	>480
Sodium Hydroxide (40 %)	>480	>480	>480	193
Sodium Hypochlorite, Bleach (5%)	>480	>480	>480	>480
Sulfuric Acid (96 %)	2	0	2	14
Tetrachloroethylene (>99 %)	0	1	1	0
Toluene	0	0	0	0
Trichloroacetic Acid (>99 %)	15	30	23	10
DISINFECTANTS				
Chemgene Laboratory Disinfectant (1:20)	>480	>480	>480	>480
Distel Laboratory Disinfectant (1:10)	>480	>480	>480	>421
Phagogermyl	26	50	40	45
Sterillium (Alcohol based)	14	21	18	9
Stokosept® protect (Alcohol based)	16	27	21	4
Virkon Disinfectant (3 %)	>480	>480	>480	>480

Caution: All tests for determination of breakthrough times were carried out in minutes according to the EN16523-1:2015 standard under laboratory conditions. The actual conditions at the actual working space might have an impact on the resistance to chemical permeation and can lead to varying chemical breakthrough times. The test results are no substitute for an evaluation carried out by the user. All StarGuard® gloves are non-sterile, ambidextrous and intended for single-use only. All recommendations and test results are for rference purpose only and are subject to errors and data revision if updated data becomes available. Every effort has been made to ensure the content of this publication is correct. Starlab can not take responsibility for any errors or omissions. Please visit **starlabgroup.com** for the most current information.

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For the nerds: the tech specs.

StarGuard® glove specifications.




GLOVE SPECIFICATIONS	COMFORT	PROTECT	SENSITIVE	TOUCH
Gloves per Case	10 x 250 (XL 10 x 230)	10 x 100	10 x 200	10 x 100 (XL 10 x 90)
Glove Material	Nitrile	Nitrile	Nitrile	Latex
Type	Powder-Free, Ambidextrous, Single Use, Non Sterile			
Colour	Light Blue	Violet Blue	Blue	Natural
Cuff	Beaded	Beaded	Beaded	Beaded
Texture	Fingers	Fingers	Fingers	Fully
Weight (g)	3.5	5.2	4.2	6
Length (mm)	245	250	240	245
Cuff Thickness (mm)	0.06	0.09	0.06	0.10
Palm Thickness (mm)	0.07	0.11	0.07	0.13
Finger Thickness (mm)	0.11	0.18	0.10	0.16
MATERIAL CHARACTERISTICS				
Minimum Elongation before Aging (%)	500	500	500	650
Elongation after Aging (%)	400	400	400	600
Tensile Strength before Aging (MPa)	33	30	29	22
Tensile Strength after Aging (MPa)	31	29	14	20
Force at Break before Aging (N)	7	10	7	9
Force at Break after Aging (N)	7	11	7	6

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StarGuard® glove specifications.




QUALITY	COMFORT	PROTECT	SENSITIVE	TOUCH
Shelf Life (years)	5	5	3	5
AQL	0.65	0.65	1.5	1.5
COMPLIANCES TO STANDARDS				
PPE EU Regulation 2016/425	Personal Protective Equipment (PPE) Category III			
EN420	In compliance, Sizing for special purpose			
EN 374-1	Type B	Type B	Type B	Type B
EN374-2	Level 3 (AQL 0.65)	Level 3 (AQL 0.65)	Level 2 (AQL 1.5)	Level 2 (AQL 1.5)
EN16523-1	In compliance, splash protection			
EN 374-4	In compliance, determination of resistance to degradation			
EN 374-5	In compliance, requirements for micro-organism risks			
EN455	In compliance with Parts 1,2,3			
ISO 11193 -1	In compliance, single-use medical examination glove			
ISO 21171/ASTM D6124	In compliance, determination of removable surface powder			
ISO 16604	In compliance, protection against penetration by blood-borne pathogens			
ASTM D6319	✓	✓	✓	not applicable
ASTM D5712	not applicable	not applicable	not applicable	✓
ASTM D6978-05	In compliance, tested for use against chemotherapy drugs			not applicable
Regulation (EC) No 1935/2004	In compliance, materials and articles intended to come into contact with food			

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