



STC420F - Rev 10 - 22.04.06

CERTIFICATION CATEGORY III

CE 0334

ULTRANITRIL 480 - 493

CE-Type Examination Certificates

ULTRANITRIL 493 : 0072/014/162/01/95/0071

ULTRANITRIL 480 : 0072/014/162/01/95/0071/EX02 03 97

issued by the approved body nr. 0072

I.F.T.H – Av. Guy de Collongue - F-69134 ECULLY CEDEX

Certificate of conformity of the Quality Assurance System

issued by the approved body nr. 0334

ASQUAL - 14, rue des Reculettes - F-75013 PARIS

These gloves conform to the provisions of Directive 89/686/EEC
for protection against mechanical risks, chemicals and micro-organisms
within the limit of the recommendations hereafter.

57, rue de Villiers - B.P. 190
92205 NEUILLY SUR SEINE CEDEX – France
Tél : 33 (0) 1 49 64 22 00 - Fax : 33 (0) 1 46 64 24 29
www.mapa-professionnel.com

MAPA (U.K.) Ltd
Berkeley Business Park
WR4 9ZS - U.K
Tel : (44) 0 1905 450300 – Fax: (44) 0 1905 450350

MAPA[®]
PROFESSIONNEL

ULTRANITRIL 480 - 493

DESCRIPTION AND GENERAL PROPERTIES

Liquidproof gloves made of **green nitrile** rubber.

Internal layer made of **white nitrile** rubber.

Curved fingers and **contoured palm**.

Non-slip finish in palm and fingers area.

Guaranteed **silicone-free**.

Conform to the FDA (American Food and Drug Administration) regulation for **food contact**.

Thickness (in wrist area) : **0.55 mm** (nominal value)

Référence	Internal Surface	Glove Length for all sizes (in cm)*	Sizes available
ULTRANITRIL 480	chlorinated	46	7-8-9-10
ULTRANITRIL 493	cotton flocklined	39	8-9-10

Standard packaging :

- **each pair** in printed polyethylene bag
 - 493 : **50 pairs** per carton
 - 480 : **12 pairs** per carton.

"CE"-TYPE EXAMINATION RESULTS



PROTECTION AGAINST CHEMICALS

According to EN 374 standard.
Liquidproof gloves.
Permeation data :
see the enclosed chemical resistance chart.

AJKL



PROTECTION AGAINST MECHANICAL RISKS

According to **EN 388** standard.

4 1 0 2
| | | |
| | | | → **puncture resistance (0 to 4)**
| | | | → **tear resistance (0 to 4)**
| | | | → **blade cut resistance (0 to 5)**
| | | | → **abrasion resistance (0 to 4)**

Acceptable Quality Level (**AQL**) : **0.65 %**



PROTECTION AGAINST MICRO-ORGANISMS

Levels of performance according to EN 374 standard

ULTRANITRIL 480 – 493

SPECIFIC ADVANTAGES

- Higher resistance for an enhanced protection thanks to glove thickness.
- Superior working life : excellent mechanical resistance (abrasion, puncture).
- High chemical resistance to hydrocarbon derivatives and alcohols.
good chemical resistance to aromatic and chlorinated solvents.
- Safe grip of slippery objects thanks to non-slip finish.
- Adapted for food handling.
- Recommended for persons sensitized to natural rubber proteins.
- Produits fabriqués dans une usine MAPA certifiée ISO 9001.

MAIN FIELDS OF USE

- Metal treatment using solvents.
- Manufacturing and application of paint and varnish.
- Automotive industries
- Chemical treatments.
- Cleaning of printing press equipment
- Electronics industry
- Timber treatment and finishing

INSTRUCTIONS FOR USE

For enhanced safety and service life of the gloves :

- Store the gloves in their original packaging protected from light, humidity and heat.
- It is recommended to check that the gloves are suitable for the intended use, because the conditions of use at workplace may differ from the "CE"-type tests.
- Persons sensitized to dithiocarbamates and thiazoles should not use these gloves.
- Put the gloves on dry, clean hands.
- Do not use the gloves in contact with a chemical for a duration in excess of the measured breakthrough time. Refer to the chemical resistance chart hereafter or contact the Technical Customer Service - MAPA PROFESSIONNEL in order to know this breakthrough time. Use 2 pairs alternatively when in long duration contact with a solvent.
- Turn the cuff end down in order to prevent a hazardous chemical from dripping onto the arm.
- Before taking off the gloves, clean them as appropriate :
 - in use with paints, pigments and inks : wipe with a clean cloth dampened with a suitable solvent, and rub over with a dry cloth.
 - in use with a solvent (dilents, etc...) : rub over with a dry cloth.
 - in use with acids or alkalies : thoroughly rinse the gloves under running water, and rub over with a dry clothCaution : improper use of the gloves or submitting them to any cleaning or laundering process can alter their performance levels.
- Ensure the inside of the gloves is dry before putting them on again
- Inspect the gloves for cracks or snags before reusing them.

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CHEMICAL RESISTANCE CHART

These gloves are designed for protection against numerous chemicals such as alcohols, petroleum, aromatic or chlorinated solvents. They are not recommended for contact with ketones and nitrogen compounds. In order to know whether these gloves are appropriate for a given chemical, refer to the table hereafter or enquire to Mapa Professionnel's Technical Customer Service.

The results quoted in the table hereafter are relative to tests performed on the glove reference ULTRANITRIL 493 unless otherwise specified.

CHEMICAL	CAS Nr	Chemical Resistance Index	Degradation Index (1 to 4)	Permeation (EN 374)	
				Breakthrough time (minutes)	Permeation index (0 to 6)
Acetic acid 50%*	64-19-7	++	4	>480	6
Acetic acid 100%*	64-19-7	=	ND	118	3
Acrylonitrile*	107-13-1	-	1	12	1
Ammonium hydroxyde 30%*	1336-21-6	++	4	> 480	6
t-Amyl methylether*	994-05-8	++	ND	> 480	6
Aniline*	62-53-3	-	1	72	3
Benzene*	71-43-2	-	1	27	1
2-Butoxyethanol*	111-76-2	++	4	> 480	6
Butyl acetate	123-86-4	+	3	51	2
t- Butyl methylether	1634-04-4	++	4	> 480	6
Carbon disulfide* E	75-15-0	=	2	20	1
Carbon tetrachloride*	56-23-5	++	3	341	3
Chromic acid 50%*	7738-94-5	=	4	>175	4
m-Cresol*	108-39-4	+	2	210	4
Cumene*	98-82-8	++	3	271	5
Cyclohexane	110-82-7	++	4	> 360	5**
Cyclohexanone	108-94-1	=	2	46	2
1,3 Dichlorobenzene*	541-73-1	-	1	73	3
1,2-Dichloroethane*	107-06-2	-	1	18	1
Dicloromethane (methylene chloride) D	75-09-2	-	2	2	0
Diethanolamine*	111-42-2	++	4	> 480	6
Diethyl ether*	60-29-7	++	4	64	3
N-N Dimethyl acetamide	127-19-5	-	1	18	1
Dimethylformamide*	68-12-2	-	ND	35	2
Dimethyl sulfoxyde*	67-68-5	++	3	> 480	6
Epichlorhydrin*	106-89-8	-	ND	4	0
Ethanol	64-17-5	++	4	235	4
2-Ethoxyethanol*	110-80-5	++	4	416	5
2-Ethoxy ethyl acetate*	111-15-9	++	3	162	4
Ethylene glycol*	107-21-1	++	4	> 480	6
Ethylene oxyde*	75-21-8	-	ND	31	2
Formaldehyde 37%	50-00-0	++	4	> 480	6
Freon 12*	75-71-8	++	ND	> 480	6
Freon 113 (1,1,2-Trichlorotrifluorethane)*	76-13-81	++	4	> 480	6
Furfural*	98-01-1	=	ND	61	3
Gazoil*	68334-30-5	++	ND	> 480	6
Hexane*	110-53-3	++	4	> 480	6
n-Heptane J	142-82-5	++	ND	> 480	6
Hydrazine 70%*	302-01-2	++	4	> 480	6
Hydrochloric acid 35%*	7647-01-0	++	ND	>480	6
Hydrofluoric acid 48%*	7664-39-3	=	4	134	4
Isobutanol*	78-83-1	++	4	> 480	6
Isopropanol	67-63-0	++	4	> 360	5**

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CHEMICAL RESISTANCE CHART

PRODUIT CHIMIQUE	N°CAS	Indice de résistance chimique	Indice de dégradation (de 1 à 4)	Perméation (EN 374)	
				Temps de passage (minutes)	Indice de perméation (de 0 à 6)
Kerosene*	8008-20-6	++	4	> 480	6
Methanol ^o	A 67-56-1	++	4	68	3
Methyl ethyl ketone	78-93-3	-	2	7	0
Methyl isobutyl ketone*	108-10-1	-	ND	57	2
n-Methyl-2-Pyrrolidone*	872-50-4	-	ND	108	3
Nafta*	8030-30-6	++	4	>480	6
Nafta VM&P*	8032-32-4	++	4	> 480	6
Nitric acid 50%*	7697-37-2	=	3	341	5
Nitric acid 70%*	7697-37-2	=	ND	49	2
Nitrobenzene*	98-95-5	-	1	45	2
PCB 1254 50% in trichlorobenzene* (Polychlorobiphenyl)	-	++	4	> 480	6
Phenol (saturated)*	108-95-2	++	3	255	5
Phosphoric acid 85%*	7664-38-2	++	4	>480	6
Potassium hydroxyde 50%*	1310-58-3	++	4	> 480	5
Pyridine*	110-86-1	-	1	26	1
Sodium hydroxyde 40%	K 1310-73-2	++	ND	> 480	6
Sodium hydroxyde 50%	1310-73-2	++	4	> 480	6
Sulfuric acid 50%*	7664-93-9	++	4	>480	6
Sulfuric acid 96% ^o	L 7664-93-9	=	ND	138	4
Tetrachlorethylene (perchlorethylene)*	127-18-4	++	ND	176	4
1,1,2,2 -Tetrachloroethane*	79-34-5	-	1	58	2
Tetrahydrofurane (THF)*	H 109-99-9	-	1	17	1
Toluene	F 108-88-3	=	3	22	1
Toluene diisocyanate*	584-84-9	+	2	> 480	6
1,1,1-Trichloroethane	71-55-6	-	1	54	2
Trichlorethylene*	79-01-6	-	1	9	0
Triethanolamine*	102-71-6	++	4	> 480	6
2, 2, 2- Trifluoroethanol*	75-89-8	-	1	42	2
Turpentine*	8006-64-2	++	4	> 480	6
Unleaded petrol*	8006-61-9	++	4	> 480	6
Vinyl acetate*	108-05-4	=	2	30	1
Xylene	1330-20-7	+	3	44	2

NT: not tested yet * : tests discontinued after 6 hours ^o Tests on glove Ultranitрил 480

**Permeation test according to ASTM F 739 at ambient temperature on Ultranitрил 480 glove.

Chemical Resistance Index :

- ++ can be used for **long duration contact** (limited to breakthrough time)
- + can be used for **short repeated contacts** (for a total duration not exceeding the breakthrough time)
- = can be used against **splashes**
- **not recommended**

Degradation Index : a high index indicates a low degradation of the gloves in contact with the chemical.

Breakthrough Time : permeation test performed on the palm of the glove at 30°C in MAPA laboratories, unless otherwise specified.

Permeation Index : a high index indicates a long breakthrough time.