



STC420E - Rev 4 - 22.02.06

CERTIFICATION CATEGORY III

CE 0334

TECHNIC 420 - 450

CE-Type Examination Certificates

TECHNIC 420 : 0072/014/162/05/94/10514

TECHNIC 450 : 0072/014/162/05/94/10514/Ex02 05 94

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.

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MAPA®
PROFESSIONNEL

TECHNIC 420 - 450

DESCRIPTION AND GENERAL PROPERTIES

Liquidproof gloves made of **black neoprene (polychloroprene)** rubber.

Cotton flock-lining over an internal layer of **white natural latex**.

Curved fingers and **contoured palm**.

Non-slip finish in palm and fingers area.

Surface treatment with **silicone**.

| Reference | Glove Length for all sizes (in cm)* | Thickness in wrist area (in mm)* | Sizes available | Standard packaging Number of pairs | |
|-------------|-------------------------------------|----------------------------------|---------------------------------|------------------------------------|------------|
| | | | | per printed PE bag | per carton |
| Technic 420 | 31 | 0.75 | 6 - 6 ½ 7 - 7 ½ | 1 | 100 |
| Technic 450 | 41 | | 8 - 8 ½ 9 - 9 ½ 10 - 10 ½ | 1 | 50 |

* nominal values

"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

Levels of performance according to **EN 388** standard

3 1 2 1
| | | |
| | | | ↪ 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

According to **EN 374** standard.

TECHNIC 420 - 450

SPECIFIC ADVANTAGES

- Freedom of movement : flexibility of neoprene and comfort of cotton flocklining.
- Excellent grip thanks to raised pattern.
- Multi-purpose chemical resistance : acids, aliphatic solvents.
- Resistant to sunlight and ozone.
- Products manufactured in a MAPA factory which is ISO 9001 certified.

MAIN FIELDS OF USE

- Handling in chemical industry
- Manufacture of electrical accumulators
- Application of fertilizer
- Leather treatment
- Manufacture of applied abrasives
- Manufacture and installation of ovens
- Glue manufacturing

INSTRUCTIONS FOR USE

For enhanced safety and service life of the gloves :

- Store the gloves in their original packaging at a temperature not below 5°C.
 - 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.
 - It is not recommended for persons sensitized to natural latex, thiazoles and dithiocarbamates to 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 (diluent, 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 cloth
- Caution : improper use of the gloves or submitting them to a cleaning or laundering process which is not specifically recommended 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.

TECHNIC 420 - 450

CHEMICAL RESISTANCE CHART

These gloves are designed for protection against numerous chemicals such as acids, bases, alcohols, petroleum solvents. 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.

| CHEMICAL | CAS Nr | Chemical Resistance Index | Degradation Index (1 to 4) | Permeation (EN 374) Breakthrough time (minutes) | Permeation index (0 to 6) |
|--|-----------|---------------------------|----------------------------|---|---------------------------|
| Acetic acid 100% | 64-19-7 | = | 4 | 182 | 4 |
| Acetone B | 67-64-1 | = | 3 | 16 | 1 |
| Acetonitrile C | 75-05-8 | = | NT | 11 | 1 |
| 2-Butoxyethanol | 111-76-2 | ++ | 4 | 103 | 3 |
| Butyl acetate | 123-86-4 | = | 2 | 22 | 1 |
| T-butyl methyl ether | 1634-04-4 | = | 2 | 20 | 1 |
| Cyclohexane | 110-82-7 | + | 3 | 40 | 2 |
| Dichloromethane D | 75-09-2 | - | 2 | 3 | 0 |
| Diethylamine G | 109-89-7 | - | 2 | 7 | 0 |
| N-N Dimethylacetamide* (DMAC) | 127-19-5 | + | 3 | 32 | 2 |
| Dimethyl formamide (DMF) | 68-12-2 | + | 3 | 48 | 2 |
| Dimethyl sulfoxide (DMSO) | 67-68-5 | ++ | 4 | > 360 | 5** |
| Ethanol | 64-17-5 | ++ | 4 | 135 | 4 |
| Ethyl acetate I | 141-78-6 | = | 3 | 13 | 1 |
| n-Heptane J | 142-82-5 | + | NT | 33 | 2 |
| Hexane* | 110-54-3 | ++ | 4 | 30 | 1 |
| Hydrochloric acid 35% | 7647-01-0 | ++ | 4 | > 480 | 6 |
| Hydrofluoric acid 48%* | 7664-39-3 | = | NT | 15 | 1 |
| Hydrofluoric acid gas 99%* (hydrogen fluoride) | 7664-39-3 | = | NT | 25 | 1 |
| Isopropanol | 67-63-0 | ++ | 4 | 288 | 5 |
| Methanol A | 67-56-1 | ++ | 4 | 70 | 3 |
| Methyl ethyl ketone (MEK) | 78-93-3 | - | 2 | 9 | 0 |

TECHNIC 420 - 450

CHEMICAL RESISTANCE CHART

| CHEMICAL | CAS Nr | Chemical Resistance Index | Degradation Index (1 to 4) | Permeation (EN 374) | |
|---------------------------------------|------------|---------------------------|----------------------------|-----------------------------|---------------------------|
| | | | | Breakthrough time (minutes) | Permeation index (0 to 6) |
| Methyl isobutyl ketone (MIBK) | 108-10-1 | = | 3 | 24 | 1 |
| Methyl methacrylate | 80-62-6 | = | 3 | 9 | 0 |
| N-Methyl-2 Pyrrolidone | 872-50-4 | + | 3 | 55 | 2 |
| Naphta | 64742-47-8 | ++ | 4 | 123 | 4 |
| Nitric acid 68% | 7697-37-2 | ++ | 4 | > 480 | 6 |
| Nitrobenzene* | 98-95-5 | = | 2 | 41 | 2 |
| 2-Nitropropane | 79-46-9 | = | 3 | 30 | 1 |
| Phosphoric acid 75% | 7664-38-2 | ++ | 4 | > 480 | 6 |
| Sodium hydroxide 40% K | 1310-73-2 | ++ | NT | > 480 | 6 |
| Styrene | 100-42-5 | = | 2 | 13 | 1 |
| Sulphuric acid 96% L | 7664-93-9 | = | 4 | 225 | 4 |
| Tetrachlorethylene (perchlorethylene) | 127-18-4 | - | 2 | 8 | 0 |
| Tetrahydrofurane (THF) H | 109-99-9 | - | 1 | 8 | 0 |
| Toluene F | 108-88-3 | - | 1 | 6 | 0 |
| 1,1,1 Trichlorethane | 71-55-6 | = | 2 | 20 | 1 |
| Trichlorethylene | 79-01-6 | - | 2 | 5 | 0 |
| Vinyl acetate | 108-05-4 | = | 3 | 7 | 0 |
| Xylene | 1330-20-7 | - | 1 | 12 | 1 |

** test discontinued after 6 hours NT: not tested yet

* : According to ASTM F739 test method

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 .

"CE" DECLARATION OF CONFORMITY

The Company

MAPA s.n.c.

57, rue de Villiers

BP 190

92205 Neuilly-sur-Seine Cedex - France

declares that the following MAPA PROFESSIONNEL protective gloves :

NEOPRENO 419 TECHNIC 401
TECHNIC 420 TECHNIC 450

conform to the gloves which are the subject of "CE" certificates of conformity

NEOPRENO 419: 0072/014/162/05/94/10516

TECHNIC 401 : 0072/014/162/05/94/10517

TECHNIC 420 : 0072/014/162/05/94/10514

TECHNIC 450 : 0072/014/162/05/94/10514-EX 02/05/94

issued by the notified body nr **0072**

I.F.T.H

Av. Guy de Collongue - F-69132 ECULLY CEDEX

They are manufactured under a certified **Quality Assurance System** issued by the notified body nr **0334**

ASQUAL

14, rue des Reculettes
F-75013 PARIS

CERTIFICATION CATEGORY III

They conform to the provisions of directive **89/686/CEE**. They are designed for protection against **chemicals, micro-organisms and mechanical risks**, as specified in Article 8-4.(a) within the limits of use described in the technical documentation.

They are manufactured in conformance with the following **European Standards** :
EN420, EN 374 and EN 388

Prepared at Neuilly-sur-Seine, on November 18, 2005

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Technical Customer Service

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