



STC454E – Rev2 - 13.03.06

**CERTIFICATION CATEGORY III**

**CE 0334**

# **OPTIMO 454**

**CE-Type Examination Certificate**

**0072/014/162/09/96/0057/Ex01 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

This glove conforms to the provisions of Directive 89/686/EEC for protection against chemicals, micro-organisms and mechanical risks.

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**MAPA®**  
**PROFESSIONNEL**

## **DESCRIPTION AND GENERAL PROPERTIES**

Liquidproof glove made of **turquoise synthetic rubber**.

**Cotton flock-lining** over an internal layer of **synthetic rubber**

**Curved fingers** and **contoured palm**.

**Non-slip finish** in palm and fingers area.

External surface lightly coated with **silicone**.

**THIS GLOVE IS GUARANTED NATURAL RUBBER FREE**  
**It is recommended for persons sensitized to**  
**natural rubber proteins.**

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

Glove length (for all sizes) : **31 cm** (typical value)

Thickness (in wrist area) : **0.35 mm** (typical value)

Sizes available : 6 - 6 ½  
7 - 7 ½  
8 - 8 ½  
9 - 9 ½  
10 - 10 ½

Standard packaging :

- **each pair** in printed polyethylene bag
- **50 pairs** per carton

## **"CE"-TYPE EXAMINATION RESULTS**



### **PROTECTION AGAINST CHEMICALS**

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



### **PROTECTION AGAINST MECHANICAL RISKS**

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

**3 0 0 0**

| | | | ↳ **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.

# **OPTIMO 454**

## **SPECIFIC ADVANTAGES**

- Hypoallergenic gloves, recommended for persons sensitized to natural rubber proteins.
- Unique MAPA synthetic material provides superior touch sensitivity.
- Good grip of slippery objects thanks to non-slip finish.
- Superior comfort thanks to the anatomical shape and high quality cotton flocklining.
- Product manufactured in a MAPA factory which is ISO 9001 certified.

## **MAIN FIELDS OF USE**

- General cleaning
- Catering
- Fish manipulation and preparation
- Handling of tinned food
- Laboratories
- Sorting and handling of fruit and vegetables
- Handling of small parts
- Manufacture and application of paints

## **INSTRUCTIONS FOR USE**

For enhanced safety and service life of the gloves :

- Store the gloves in their original packaging protected from direct sunlight and heat sources.
  - 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 sensitised 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 chemical from dripping onto the arm.
  - gloves, clean them as appropriate :
    - ☐ in use with a solvent (Naphta, etc...) : rub over with a dry cloth
    - ☐ in use with acids or alkalines : 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.

## CHEMICAL RESISTANCE CHART

This glove is designed for protection against numerous chemicals such as mild acids, alkalines, detergents, alcohols and petroleum solvents. It is not recommended for contact with ketones. In order to ensure this glove is 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 80%	64-19-7	-	1	43	2
Acetone <b>B</b>	67-64-1	-	1	1	0
Bleach 12° *	7681-52-9	++	3	NT	NT
Gasoil	68334-30-5	++	4	165	4
Hydrochloric acid 35%	7647-01-0	=	2	461	5
Isopropanol	67-63-0	+	4	45	2
Methanol <b>A</b>	67-56-1	-	2	9	0
Naphta	64742-47-8	++	NT	86	3
Nitric acid 20%	7697-37-2	+	2	> 480	6
Phosphoric acid 75%	7664-38-2	++	3	> 480	6
Sodium hydroxide 20%	1310-73-2	++	3	> 480	6
Sodium metabisulfite	7681-57-4	+	2	> 480	6
Sulphuric acid 50%	7664-93-9	++	3	> 480	6
Toluene <b>F</b>	108-88-3	-	1	1	0
Unleaded petrol 98	8006-61-9	-	2	3	0

\* Chemical Resistance Index determined from degradation result only

NT: not tested yet

### 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 glove :

**OPTIMO 454**

conforms to the glove which is the subject of **"CE" certificate of conformity**

**nr 0072/014/162/09/96/0500/Ex01 03 97**

issued by the notified body **nr 0072**

**Institut Textile de France**

Av. Guy de Collongue - F-69134 ECULLY CEDEX

It conforms to the provisions of directive **89/686/CEE**, designed for protection against **chemicals, micro-organisms and mechanical risks**,

and is manufactured in conformance with the following **European Standards** :  
**EN 420, EN 374 and EN 388.**

Prepared at Neuilly-sur-Seine, on October 10, 1997

**MAPA**  
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Technical Customer Service

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