



STC405E - Rev 5 - 21.06.05

CATEGORY III CERTIFICATION

**CE** 0334

# DUO-MIX 405

**CE-Type Examination Certificate**

**0072/014/162/01/95/0063/Ex05 02 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 mechanical risks, radioactive contamination, chemicals and micro-organisms.

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**MAPA**<sup>®</sup>  
PROFESSIONNEL

# DUO-MIX 405

## DESCRIPTION AND GENERAL PROPERTIES

Liquidproof glove made of **blue/yellow natural latex blended with neoprene (polychloroprene)**.

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

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

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

External surface lightly coated with **silicone**.

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

Glove length (for all sizes) : **33 cm** (nominal value)

Thickness (in wrist area) : **0.70 mm** (nominal value)

**Sizes available:**

- 6 - 6½
- 7 - 7½
- 8 - 8½
- 9 - 9½
- 10 - 10½

Standard packaging :

- **each pair** in printed polyethylene bag
- **100 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.

Acceptable Quality Level (AQL) : 0.65%



### PROTECTION AGAINST MICRO-ORGANISMS

According to EN 374 standard



### PROTECTION AGAINST MECHANICAL RISKS

Levels of performance according to EN 388 standard.

2	1	2	1

↳ puncture resistance (0 to 4)  
↳ tear resistance (0 to 4)  
↳ blade cut resistance (0 to 5)  
↳ abrasion resistance (0 to 4)



### PROTECTION AGAINST RADIOACTIVE CONTAMINATION

According to EN 421 standard.

# DUO-MIX 405

## SPECIFIC ADVANTAGES

- High dexterity thanks to material flexibility.
- Optimized resistance thanks to natural latex-neoprene blend and glove thickness.
- Safe grip of slippery objects thanks to non-slip finish.
- Products manufactured in a MAPA factory which is ISO 9001 certified.

## MAIN FIELDS OF USE

- Industrial cleaning
- Surface treatment in industry
- Rubbing down
- Maintenance
- Timber industry

## INSTRUCTIONS FOR USE

For enhanced safety and service life of the gloves :

- Store the gloves in their original packaging protected from direct sunlight, far from heat sources or electric equipment.
- 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, dithiocarbamates and thiazoles 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 a solvent (alcohols, 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 : using the gloves or submitting them to another 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.

# DUO-MIX 405

## CHEMICAL RESISTANCE CHART

This glove is designed for protection against numerous chemicals such as mild acids, bases, detergents, alcohols. It is not recommended for contact with petroleum, aromatic or chlorinated solvents. In order to know whether 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 Breakthrough time (minutes)	Permeation Index (EN 374) (0 to 6)
Butyl acetate*	123-86-4	-	2	10	0
t-Butyl Methyl Ether*	1634-04-4	-	2	6	0
Cyclohexane*	110-82-7	-	1	10	0
Cyclohexanone	108-94-1	=	3	11	1
n-n Dimethylacetamide	127-19-5	+	4	23	1
Dimethylformamide	68-12-2	+	4	31	2
Ethanol	64-17-5	+	4	22	1
Ethyl acetate*	141-78-6	-	2	4	0
Hydrochloric acid 35%	7647-01-0	++	NT	> 480	6
Isopropanol*	67-63-0	+	4	38	2
Methanol	67-56-1	+	4	17	1
Methylethylcetone*	78-93-3	=	3	4	0
n-Methyl-Pyrrolidone	872-50-4	+	4	40	2
2-Nitropropane °	79-46-9	=	3	NT	-
Sodium hydroxide 50%	1310-73-2	++	NT	> 480	6
Toluene*	108-88-3	-	1	6	0
1,1,1 Trichlorethane ° *	71-55-6	-	1	NT	-
Xylene*	1330-20-7	-	1	4	0

T : not tested yet

° Chemical Resistance Index determined from the degradation result only

\* Tested on glove of similar nature and thickness

### 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 in MAPA laboratories, unless otherwise specified, on the palm of the glove.

**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 :

**DUO-MIX 405**

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

**nr 0072/014/162/01/95/0063/Ex05 02 95**

issued by the notified body nr **0120**

**I.F.T.H**

Av. Guy de Collongue - F-69134 ECULLY CEDEX

It is manufactured under a certified **Quality Assurance System-Certificate** issued by the **notified body nr 0334**

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

**CATEGORY III CERTIFICATION**

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

It is manufactured in conformance with the following **European Standards** :  
**EN420, EN 374, EN 388 and EN 421.**

Prepared at Neuilly-sur-Seine, on February 22, 1999

**MAPA**  
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