

for our
teams



for our
users

for the
environment

MAPA 837
KRYTECH
E
04/2021
UK

2023 CATALOGUE

PROTECTIVE GLOVES

A solution
for every hand
that works

MAPA[®]
PROFESSIONAL

MAPA PROFESSIONAL introduces its

Corporate Social Responsibility initiative "Our Caring Actions"

Our long-term perspective centres around a process of continuous improvement to develop more responsible sourcing, mitigate our environmental impact and improve social standards with concrete actions and specific goals set within 2025. We are striving to meet our stakeholders' expectations whilst working towards a greener future in which we play an active role in terms of sustainability as we firmly believe that all our efforts, our caring actions for you, for us, no matter how big or small, once combined and multiplied, will have a positive impact.



TIME-HONOURED EXPERTISE AND KNOW-HOW

- An industrial expertise in gloves manufacturing since 1957
- Materials and products are traced and controlled to be compliant with our quality policy
- 100% of our factories certified ISO 9001 (quality management)

PRODUCT PERFORMANCE THAT GOES BEYOND THE STANDARDS

- Exclusive tests on products beyond the PPE standards for:
 - ⊕ performance
 - ⊕ innocuousness
 - ⊕ comfort
 - ⊕ durability
- Some products are OEKO TEX certified, DMF-free or undergo dermatological tests

A REAL COMMAND OF JOB-RELATED RISKS

- In-depth workstations analyses at workplaces to identify users' needs
- Tailor-made recommendations

TO BE CONTINUALLY INNOVATING

- 30 R&D experts to take our innovations further still
- Tests conducted on our own laboratories in real conditions
- Innovation every year

2025 GOALS

Develop a decision support solution for our users to offer them better protection and efficiency



PROTECTING THE PEOPLE WHO MANUFACTURE OUR GLOVES

- Safe and ergonomic workplaces: 100% of employees are equipped with appropriate PPE and are trained in safety issues
- Strict ethics policy (human rights and anti-corruption)
- Our factories are certified ISO 45001
- BSCI or SEDEX audits carried out in our factories each year
- All our subcontractors are committed to our code of conduct, and all those in high-risk areas are audited annually

ENSURING A CARING CORPORATE CULTURE

- Our objective is to create best working conditions for our employees
- Active social policy that goes beyond legal requirements
- Working actively to maintain professional equity within all our employees

GETTING INVOLVED LOCALLY

- Relationship of dialogue with the local authorities and communities in the countries in which we operate
- Raw materials and packaging sourced close to our factories
- A culture of caring, listening and solidarity: all mobilised in local actions

2025 GOALS

Train 100% of our employees in CSR matters

Reduce our work-related incident rate by 40% in 5 years (from 2020)



A REDUCED ENVIRONMENTAL FOOTPRINT

- Selection of the most responsible raw materials possible
- Close environmental footprint monitoring of our factories certified ISO 14001
- Reduction of our transport-related Greenhouse Gas emissions by 5% (Fret 21 programme)

AN ECO-DESIGN INITIATIVE

- Life Cycle Analyses carried out to identify where our main environmental impacts lay
- 50% of mechanical gloves are washable for:
 - ⊕ extended use
 - ⊕ waste reduction
- 100% of packaging is recyclable
- Optipack programme: plastic savings thanks to reduced packagings (-22 tonnes in 2020)

2025 GOALS

Look for more sustainable raw materials for each new development

Reduce the environmental footprint of our factories (participation in Newell targets from 2016 to 2025)

-20%
in water use

-90%
in waste sent to landfill

-25%
in energy consumption

-30%
in greenhouse gas emissions

Continue to reduce our plastic packaging

Extend products' lifespan by targeting

100% of cut-resistant gloves washable

Investigate on improved product's end-of-life (recycling and donation)

A SOLUTION FOR EVERY HAND THAT WORKS

Mapa Professional is committed to offering companies **innovative solutions** for protecting the hands which meet users' needs.

Our brand is involved in **the health and safety** of users at their workplace.

Our offer meets requirements for **comfort and protection** for most risks in the professional environment.

PROTECTION OF THE HAND MAPA PROFESSIONAL BEYOND THE GLOVE

We have a team dedicated to understanding our users' needs and to designing solutions suitable for use at workstations for most industries.



1 Customer Engineering Department
stc.mapaspontex@newellco.com



2 R&D centres
(30 engineers and technicians)



Integrated production
(3 factories worldwide)



1 Application laboratory
With tests exclusive to MAPA Professional which reproduce actual conditions of use over and above those specified in the framework (Grip, durability, dexterity, contact heat).

HOW TO READ THIS CATALOGUE?

Step 1: Identify your protection needs



PAGE 14
Chemical protection
Disposable
Reusable



PAGE 34
Mechanical protection
Cut protection
Handling protection



PAGE 54
Thermal protection



PAGE 56
Food expert range



PAGE 64
Critical environment protection

Step 2: Define the type of glove

Define the type of gloves that best meets your needs in terms of:

- **usage** (performance, comfort, environment, wearing time),
- **the environment and the risks involved.**

Step 3: Select the most appropriate reference

Select the most appropriate product to meet your needs with the help of the main technical characteristics table.

MATERIAL PVC		MATERIAL NATURAL LATEX				MATERIAL LATEX MIX	
frequent CONTACT		splashes					
continuous WEAR		short WEAR		intermittent WEAR			
TELSOL 369	TELSOL 351	VITAL 175	VITAL 520	VITAL 165	VITAL 115	VITAL 210	VITAL 180
Good mechanical protection against low chemical hazards	Comfort, flexibility and mechanical protection for low chemical hazards	Dexterity and flexibility for light aggressive environments	Dexterity and flexibility in light aggressive environments	Light glove, supple and flexible	Precision dexterity in non-aggressive environments. Colour-coding to increase safety	The effective response to contact with aggressive detergents	Dexterity and better resistance to oils and greases

How to read the pictograms?



MANUFACTURE
Fitting and assembling parts
Paint spraying
Handling chemical compounds
Manufacturing composites
Handling chemical drums



HEALTH
Pharmaceutical preparation
Medical manufacturing
Research
Hospitals and clinics



MARITIME
Cultivation of fishing products



CLEANING
Handling of detergents
Industrial cleaning
Small general maintenance jobs



AERONAUTICS
Work with composite materials (resins)



FOOD AND DRINK INDUSTRY
Food handling and preparations



AGRICULTURE
Handling of diluted and concentrated pesticides
Re-entry tasks



PACKAGING INFORMATION
Pair/Bag Pairs/Masterbag Pairs/Carton



TRANSPORT
Maintenance of transport routes:
rail - automobile - maritime - air



CONSTRUCTION INDUSTRY
Handling construction materials
Glazing



ENERGY
Nuclear, wind turbine,
petrochemical industries

Regulation (EU) 2016/425

Why a PPE Regulation?

Protective gloves are PPE (Personal Protective Equipment) and must comply with the European Regulation 2016/425 in order to freely circulate within the European Union.

The Regulation 2016/425 contains the requirements that PPE must satisfy to guarantee the health and safety of users.

That means that PPE must protect up to the required levels without compromising the user's health.

Harmonised European standards (EN 388, EN ISO 374-1...) are used in the certification process to assess conformity of the product to the requirements of the PPE Regulation in relation to the risks against which the product is intended to offer protection.

The manufacturer must indicate the conformity of the product by CE marking it. He must also provide a EU declaration of conformity.

PPE Regulation (EU) 2016/425

This European Regulation was implemented on 21 April 2018. It replaced the European Directive 89/686/EC, which was withdrawn on this same date.

Regulation (EU) 2016/425 and Directive 89/656/EEC

Regulation (EU) 2016/425 stipulates the essential health and safety requirements for designing and manufacturing PPE, as well as the responsibility of manufacturers or importers and conformity procedures to affix the CE marking on PPE.

Directive 89/656/EEC is dedicated to professional users of PPE. It lays down the responsibilities of employers to supply their employees with adequate CE-marked PPE and ensure their safe use.

CATEGORIES OF RISK AND CORRESPONDING CERTIFICATION PROCEDURE

CAT 1

Minimal risks only. The manufacturer is responsible for the conformity of its products.

CAT 2

Risks other than CAT 1 and CAT 3. CE-certificate of conformity obtained from a Notified Body.

CAT 3

Risks causing irreversible damage to health. CE-certificate of conformity and conformity of the production from Notified Bodies.



How to read the standards

The following pictograms can help you understand the performance characteristics of a glove:

MECHANICAL PROTECTION	CHEMICAL AND MICRO-ORGANISMS PROTECTION	OTHERS	THERMAL PROTECTION																		
<p>MECHANICAL HAZARDS EN 388</p> <p>4 3 4 3 C (P)</p> <p>Protection against impacts (P)</p> <p>From A to F ISO 13997 cut resistance</p> <p>From 0 to 4 Puncture resistance</p> <p>From 0 to 4 Tear resistance</p> <p>From 0 to 5 Couptest cut resistance</p> <p>From 0 to 4 Abrasion resistance</p>	<p>CHEMICAL PROTECTION EN ISO 374-1</p> <p>EN ISO 374-1 / TYPE A U V W X Y Z</p> <p>Resistance to penetration EN 374-2 Breakthrough time ≥ 30 min for at least 6 chemicals on the list (EN 16523-1)</p> <p>EN ISO 374-1 / TYPE B X Y Z</p> <p>Resistance to penetration EN 374-2 Breakthrough time ≥ 30 min for at least 3 chemicals on the list (EN 16523-1)</p> <p>EN ISO 374-1 / TYPE C X Y Z</p> <p>Resistance to penetration EN 374-2 Breakthrough time ≥ 10 min for at least 1 chemical on the new list (EN 16523-1)</p> <p>Degradation test according to EN 374-4 is undertaken without performance level requirement</p> <p>LETTER CODE</p> <table border="0"> <tr> <td>A Methanol</td> <td>G Diethylamine</td> <td>M Nitric acid 65 %</td> </tr> <tr> <td>B Acetone</td> <td>H Tetrahydrofuran</td> <td>N Acetic acid 99%</td> </tr> <tr> <td>C Acetonitrile</td> <td>I Ethyl acetate</td> <td>O Ammonia 25%</td> </tr> <tr> <td>D Dichloromethane</td> <td>J n-Heptane</td> <td>P Hydrogen peroxide 30%</td> </tr> <tr> <td>E Carbon disulphide</td> <td>K Sodium hydroxide 40%</td> <td>S Hydrogen fluoride 40%</td> </tr> <tr> <td>F Toluene</td> <td>L Sulphuric acid 96%</td> <td>T Formaldehyde 37%</td> </tr> </table> <p>MICRO-ORGANISMS PROTECTION EN ISO 374-5</p> <p>EN ISO 374-5 The gloves must pass the penetration resistance test EN 374-2.</p> <p>EN ISO 374-5 For gloves protecting against bacteria and fungi.</p> <p>EN ISO 374-5 For gloves protecting against bacteria, fungi and viruses.</p> <p>VIRUS</p>	A Methanol	G Diethylamine	M Nitric acid 65 %	B Acetone	H Tetrahydrofuran	N Acetic acid 99%	C Acetonitrile	I Ethyl acetate	O Ammonia 25%	D Dichloromethane	J n-Heptane	P Hydrogen peroxide 30%	E Carbon disulphide	K Sodium hydroxide 40%	S Hydrogen fluoride 40%	F Toluene	L Sulphuric acid 96%	T Formaldehyde 37%	<p>RADIOACTIVE CONTAMINATION EN 421</p> <p>WITH NO PERFORMANCE LEVELS</p> <p>PROTECTION AGAINST PESTICIDES ISO 18889</p> <p>G1 ISO 18889 Resistance to diluted pesticides/ no mechanical risk</p> <p>G2 ISO 18889 Resistance to diluted and concentrated pesticides/ mechanical risk</p> <p>GR ISO 18889 Re-entry tasks</p> <p>PROTECTION AGAINST STATIC ELECTRICITY EN 16350</p>	<p>COLD HAZARD EN 511</p> <p>3 2 1</p> <p>0 or 1 Water permeability</p> <p>From 0 to 4 Contact cold resistance</p> <p>From 0 to 4 Convective cold resistance</p> <p>HEAT AND FIRE EN 407</p> <p>X 2 X X X X</p> <p>From 0 to 4 Resistance to large quantities of molten metal</p> <p>From 0 to 4 Resistance to small drops of molten metal</p> <p>From 0 to 4 Radiant heat resistance</p> <p>From 0 to 4 Convective heat resistance</p> <p>From 0 to 4 Contact heat resistance</p> <p>From 0 to 4 Limited flame spread</p>
A Methanol	G Diethylamine	M Nitric acid 65 %																			
B Acetone	H Tetrahydrofuran	N Acetic acid 99%																			
C Acetonitrile	I Ethyl acetate	O Ammonia 25%																			
D Dichloromethane	J n-Heptane	P Hydrogen peroxide 30%																			
E Carbon disulphide	K Sodium hydroxide 40%	S Hydrogen fluoride 40%																			
F Toluene	L Sulphuric acid 96%	T Formaldehyde 37%																			

*X: the test does not apply or the glove has not been tested

Standards information

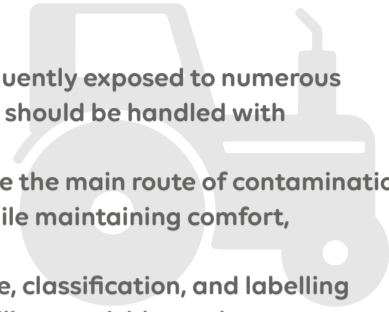
PROTECTION AGAINST PESTICIDES

ISO 18889: 2019 STANDARD




Protective gloves for pesticide operators and re-entry workers

BACKGROUND

Workers in farm and agriculture sectors are frequently exposed to numerous pesticides hazardous to health. These chemicals should be handled with precautions. Hand protection is fundamental as our hands are the main route of contamination. Gloves are necessary to protect against risks while maintaining comfort, ease of movement and dexterity. This standard establishes minimum performance, classification, and labelling requirements for gloves worn by operators handling pesticide products and re-entry workers.




GLOVE CLASSIFICATION
Protective gloves are classified into 2 categories:

WHOLE HAND PROTECTION GLOVE		PARTIAL HAND PROTECTION GLOVE (fingertips and palm-side)
Relatively low potential risk	Higher potential risk	GR gloves  ISO 18889 Re-entry worker who is in contact with dry and partially dry pesticide residues that remain on the plant after pesticide application. Mechanical properties that are required for several re-entry tasks. Breathable material in the back of the hand provides comfort.
G1 gloves  ISO 18889 Handling diluted pesticides. No mechanical risk.	G2 gloves  ISO 18889 Handling diluted or concentrated pesticides. Minimum mechanical resistance requirement.	
Disposable gloves	Chemical gloves	High dexterity mechanical gloves

STATIC ELECTRICITY

Which standard deals with electrostatic properties?

GLOVES STANDARDS REQUIREMENT	TEST METHOD	PICTOGRAM
ATEX environment	EN 16350 Vertical resistance: <math><10^8 \Omega</math> at 25% relative humidity <i>*The tests must be performed on 5 samples which must all pass the limit of vertical resistance</i>	EN 1149-2 Introduced in EN ISO 21420: 2020 NEW EN 16350 
Protection of electronic devices from ElectroStatic Discharge (ESD)	No standard	No test method No pictogram

ESD: MAPA PROFESSIONAL POSITION

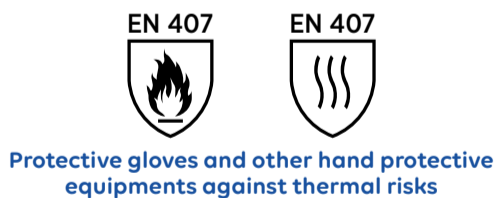
Working in ATEX zones or handling electronic devices, both areas have the same need for suitable gloves: they must be dissipative. As there is no standard for ESD gloves, at MAPA PROFESSIONAL we decided to refer to the EN 16350 (ATEX gloves). This standard is very strict, so a glove complying to EN 16350 will be suitable for handling electronic devices.





Standards changes

EN 407

The EN 407 standard was revised in 2020.

The main reason for the revision is the inclusion of thermal protection articles for private use (oven gloves, potholders, etc.) in the new PPE Regulation (EU) 2016/425. The performance levels remain unchanged!



BEFORE	NOW	BEFORE	NEW NOW
GLOVES RESISTANT TO FLAME			
EN 407  321XXX	EN 407  321XXX NO CHANGE	The performance levels were based on the average value of test results No mechanical resistance requirement	The performance levels are based on the lowest value of test results Introduction of a minimum mechanical resistance: minimum level 1 (10N) for tear resistance - EN 388
GLOVES NOT RESISTANT TO FLAME			
EN 407  X2XXXX	NEW EN 407  X2XXXX	Minimum length required by EN 420:2004 Issue with flame test with leather gloves	Higher minimum requirement of length for gloves that offer protection from metal projection Test is now reliable

EN ISO 21420

The EN 420 standard was revised in 2020 becoming standard EN ISO 21420.

This updated standard newly specifies the general requirements and test methods for glove design and construction, safety, comfort and performance, as well as the marking and information provided by the manufacturer applicable to all protective gloves.

The new EN ISO 21420 additionally applies to:

- ▶ mittens
- ▶ pot holders
- ▶ arm protectors

NEW INNOCUOUSNESS	NEW ELECTROSTATIC PROPERTIES FOR ATEX AREA	NEW GLOVE SIZING	NEW GLOVE MARKING	NEW INSTRUCTIONS FOR USE
Limited content of DMFa (Dimethylformamide) in polyurethane (PU) gloves. It shall not exceed 1,000 mg/kg Limited content of Polycyclic Aromatic Hydrocarbons (PAHs) in the rubber or plastic materials. It shall not exceed 1 mg/kg	New pictogram EN 16350  The electrostatic properties shall be tested according to the EN 16350 standard (test method EN 1149-2)	No more minimum length required Sizes of gloves are defined with respect to the sizes of the hands they are to fit!	For improved manufacturing batch traceability, gloves shall be marked with: Manufacturing date at least the month and year If applicable, obsolescence date behind the  pictogram	Instructions relevant to donning, doffing and adjusting gloves Comfort and hygiene Protection from contamination Natural rubber content warning List of substances that can cause allergies (other than rubber) are no more mandatory* on instructions for use <i>*on request</i>

UNDERSTANDING THE SPECIFIC FEATURES OF A GLOVE FOR AN INFORMED CHOICE

Different cuff edging Depending on your use



Safety cuff

Wrist protection, quick glove removal and good ventilation of the hand. Perfect for jobs with a risk of entanglement.



Knitted cuff

Provides a good fit for the hand and protects the wrist



Straight cuff

Improved hand ventilation



Rolled cuff

Reduces the risk of tearing when doffing gloves



Scalloped cut

Longer service life for the glove

Shapes, sizes and thicknesses

Glove length

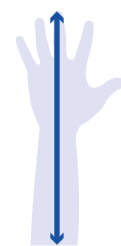
They must be chosen in accordance with the risks associated with the handling circumstances, to give more or less protection to the forearm. They generally vary between 22 and 60 cm.

Glove size

This depends on the circumference of the user's palm, and varies from size 5 to 12. This affects usage comfort.

Glove thickness

This influences the user's dexterity and the performance of the glove. Varies between 0.1 and 2.5 mm.



Anatomical or ambidextrous gloves

Anatomical gloves

A glove is called anatomical when there is one shape for the left hand and another for the right.

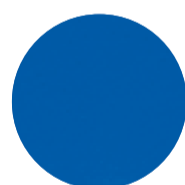


Ambidextrous gloves

Ambidextrous gloves can be worn equally well on either hand; this is mainly the case for thinner gloves.

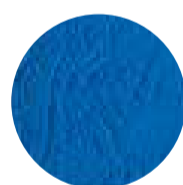


Various external finishes to suit your needs



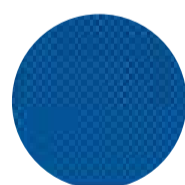
Smooth

No marking of objects being handled



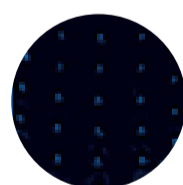
Reinforced grip

Excellent grip in wet environment



Non-slip embossed

Excellent grip in oily environments



Dot embossing

Improved thermal insulation



Pebbled

Good grip and minimal glove fouling

The different types of internal finish

Powdered

Makes it easier to don and doff gloves, without having to increase the thickness of the glove.

Chlorinated/Easy donning treatment

Makes it easier to don and doff gloves without increasing the thickness and without using powder.

Reduces the allergy risk of natural latex gloves.

Flocked

Cotton-based textile fibres, covering the inside of the gloves.

Fleeced feel comparable with that of a fine carpet.

Good sweat absorption.

Textile support

Knitted interior, made from cotton or synthetic materials for increased comfort or specific performance.

MAPA has developed an exclusive technology for manufacturing a glove with textile support. This improves comfort for the user.

Use the «Ultracomfort» pictogram  to locate this technology.

The different textile types:

Cotton

Comfort, thermal insulation and sweat absorption.

Polyamide

Optimised dexterity (thin, seamless).

Para-aramid

Cut and heat resistance.

High density polyethylene

Cut-resistance and optimised dexterity.

MAPA TECHNOLOGIES (SEE NEXT PAGE)



Increased protection
against acids
for high end
performance



Excellent grip
in oily environments
combined with
liquid-proof protection
in palm area



Comfort and allows
hand to breathe
without compromising
durability

UNDERSTANDING OUR TECHNOLOGIES



Our **TOPCHEM** technology offers increased protection against acids for high end performance



COMFORT

- Flexibility and suppleness for ease of movement
- Optimal grip prevents hand fatigue

RESISTANCE

- The specific combination of polymers provides a better degradation performance to acids
- Good mechanical resistance

DURABILITY

- Extended use guaranteed by our process
- Higher durability allows a better productivity

Thanks to our expertise and reliable use testing, MAPA PROFESSIONAL has designed a product with TOPCHEM technology to protect against acids. This technology is used in our ULTRANITRIL 410.



Our **GRIP&PROOF** coating technology offers the following benefits for use in oily and dirty environments



GRIP

- Excellent grip when handling oily parts with or without cut risks
- Prevents the risk of dropping objects
- Reduction in muscle fatigue and risk of RSI (Repetitive Strain Injury)
- Improves productivity

RESISTANCE

- The durable coating allows long-lasting use
- Glove stays clean and effective for longer due to its liquid resistance
- Optimised costs

SKIN PROTECTION

- Impermeable at strategic points
- Protects from irritant oils
- Reduces the wearer's risk of eczema and dermatitis

Thanks to our expertise and reliable use testing, MAPA PROFESSIONAL has designed a range of gloves with or without cut protection, with GRIP&PROOF technology for oily or greasy environments. This technology is used in our ULTRANE and KRYTECH ranges.



Our **RESICOMFORT** coating technology offers the following benefits for precise handling operations in dry environments



COMFORT AND BREATHABILITY

- Excellent dexterity at fingertips
- Second skin effect
- Suppleness and flexibility
- Breathability: Greater circulation of air protects against sweat

DURABILITY

- Extended use guaranteed by our exclusive process
- Resistance to friction thanks to a highly resistant coating
- Optimised costs

SKIN PROTECTION

- DMF free
- Free from harmful substances
- STANDARD 100 by OEKO-TEX®

Thanks to our expertise and reliable use testing, MAPA PROFESSIONAL has designed a range of gloves with or without cutting protection, with RESICOMFORT technology for dry environments. This technology is used in our ULTRANE and KRYTECH ranges.

NEW PRODUCTS

Products specially designed to meet chemical, mechanical and cut protection needs

CHEMICAL PROTECTION

ULTRANITRIL 410

CHEMICAL PROTECTION TYPE A CUT PROTECTION LEVEL C



Cut and Chemical protection with better degradation performance against acids

See page 23

SOLO BLACK 935

CHEMICAL PROTECTION TYPE C



Suppleness and optimal resistance

See page 31

MECHANICAL PROTECTION

ULTRANE 552



Our first eco-friendly handling glove made of recycled fibres. High dexterity and comfort for general purpose work

See page 37

ULTRANE 681

CUT PROTECTION LEVEL A



Second skin effect for optimal comfort and dexterity thanks to its 18 gauge

See page 37

CUT PROTECTION

KRYTECH 609 / 809



Light cut protection with high comfort, suppleness and durability for precision work even in dirty environments. With or without crotch reinforcement

See page 43

KRYTECH 692

CUT PROTECTION LEVEL B



Light cut protection with second skin effect for optimal comfort and dexterity thanks to its 18 gauge. High vision textile for reinforced safety

See page 45

KRYTECH 693

CUT PROTECTION LEVEL C



Medium cut protection with second skin effect for optimal comfort and dexterity thanks to its 18 gauge. High vision textile for reinforced safety

See page 45

KRYTECH 694

CUT PROTECTION LEVEL D



High cut protection with second skin effect for optimal comfort and dexterity thanks to its 18 gauge. High vision textile for reinforced safety

See page 47

CHEMICAL PROTECTION

Chemical hazards are not confined to the chemical industry. Many people, in a variety of sectors, are faced with chemical risks when handling products which are aggressive to a greater or lesser extent (oils, acids, solvents, etc.).

More than 100,000 chemical substances are now classified (identified by their CAS number).

In order to meet the wide variety of aggressive situations that exist, Mapa Professional offers a wide range of protective gloves designed using polymers, which behave differently and provide different protection according to the situation.

The results of chemical testing and the different chemical classification indices must not be seen as the only factors when selecting a glove.

Actual usage conditions, the contact time with a given chemical, the concentration, the temperature, the usage frequency of a glove and the care conditions can affect glove performance.

All of these factors should be taken into account when choosing the right glove.



Refer to our dynamic database, which is constantly updated, and download the chemical resistance tables for our gloves.

www.mapa-pro.com



THE MAPA GUIDE: 2 PERFORMANCE INDICATORS

To characterise the performance of the elastomers and plastics used to manufacture safety gloves, tests are carried out to determine the behaviour of these materials when confronted with the various families of chemical products.

Mapa Professional takes these different parameters into account to determine the relative performance of the different families of gloves and hence help you make the best possible choice.

1. PERMEATION TIMES

The permeation time for a given chemical product, i.e. the time taken for the chemical to penetrate the glove, at a molecular level; in some cases, there is no visible deterioration of the glove.

2. DEGRADATION INDEX

The degradation index of the glove in contact with a given chemical product, i.e. the degree of deterioration of the glove shown by an alteration of its physical properties (e.g. softening, hardening, etc.).

SELECT THE MOST APPROPRIATE CHEMICAL GLOVE FOR YOUR NEEDS USING THE THREE STAGES BELOW:

1 Identify which family of chemical products the substance you are handling belongs to ▼			2 Determine the most appropriate protective material for your specific application. ▼				3 Choose your gloves according to the level of protection you require. next pages ►	
YOU ARE HANDLING	CAS	EN 374	PVC	NATURAL LATEX	NITRILE	POLY-CHLOROPRENE	BUTYL	FLUORO-ELASTOMER
			Common polymers*				Specific polymers**	
			RECOMMENDATION BY MAPA PROFESSIONAL		● Light protection	●● Strong protection	●●● Optimal protection	
ALCOHOLS (methanol 100%)	67-56-1	A		●	●	●●	●●●	●●
KETONE (acetone 100%)	67-64-1	B		●		●	●●●	●●
NITRILES (acetonitrile methyl cyanide 99%)	75-05-8	C				●	●●●	●
CHLORINATED SOLVENTS (methylene chloride/dichloromethane 99%)	75-09-2	D						●
SULPHUR-BASED CHEMICALS (carbon disulphide 100%)	75-15-0	E			●			●●●
AROMATIC SOLVENTS (toluene 100%)	108-88-3	F			●			●●●
AMINES (diethylamine 98%)	109-89-7	G			●			●●
ETHERS (tetrahydrofuran (THF) 100%)	109-99-9	H			●	●	●	●
ESTERS (ethyl acetate 99%)	141-78-6	I			●	●	●●●	
ALIPHATIC SOLVENTS (heptane 99%)	142-82-5	J	●		●●●	●●		●●●
ALKALIS (sodium hydroxide (soda) 40%)	1310-73-2	K	●●●	●●●	●●●	●●●	●●●	●●●
OXIDISING ACID (sulphuric acid 96%)	7664-93-9	L	●	●		●●	●●●	●●●
OXIDISING ACID (nitric acid 65%)	7697-37-2	M	●	●●●		●●●	●●●	●●●
ORGANIC ACID (acetic acid 99%)	64-19-7	N	●	●		●●●	●●●	●●
ORGANIC BASE (ammonia 25%)	1336-21-6	O	●	●	●●		●●●	●●
PEROXIDE (hydrogen peroxide 30%)	7722-84-1	P	●●●	●●●	●●●	●●●	●●●	●●●
HYDROFLUORIC ACID (hydrogen fluoride 40%)	7664-39-3	S		●●●		●●●	●●●	●●
ALDEHYDE (formaldehyde 37%)	50-00-0	T	●●●	●●●	●●●	●●●	●●●	●●●

* The most frequently used materials for manufacturing chemical protection gloves.

** Protection targeted against certain aggressive chemical product families, these are more stringent than for standard materials.



Value for money
Mechanical strength

Excellent flexibility
Good puncture and tearing resistance
Suitable for cold environments

Good puncture and abrasion resistance
No risk of protein-related allergies

Good flexibility
Good thermal resistance

Excellent chemical resistance
Flexible and elastic

High chemical resistance



Not suitable for handling hot parts

Risk of allergies caused by the proteins in the natural latex

Not recommended for cold environments

Poor mechanical properties

Poor mechanical properties

CHEMICAL PROTECTION

REUSABLE: TELSOL - VITAL RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 RISK

Combination between contact time and the aggressiveness of the chemical being handled.
Choose the performance of your gloves based on the type of risk:

- splashes**
Chemical substances diluted by immersion or splashes of aggressive substances
- frequent contact**
Pure or mixed chemical substances in frequent contact
- prolonged contact (or immersion)**
Pure or mixed chemical substances in frequent contact

2 WEAR TIME

Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

- short wear**
Chlorinated interior finish
- intermittent wear**
Flocked interior finish
- continuous wear**
Fabric-lined interior finish
- ultra-comfort wear**
MAPA exclusive technology providing greater flexibility

MATERIAL PVC		MATERIAL NATURAL LATEX				MATERIAL LATEX MIX									
frequent CONTACT		splashes													
continuous WEAR		short WEAR		intermittent WEAR											
<p>TELSOL 369</p> <p>Good mechanical protection against low chemical hazards</p>	<p>TELSOL 351</p> <p>Comfort, flexibility and mechanical protection for low chemical hazards</p>	<p>VITAL 175</p> <p>Dexterity and flexibility for light aggressive environments</p>	<p>VITAL 520</p> <p>Dexterity and flexibility in light aggressive environments</p>	<p>VITAL 165</p> <p>Light glove, supple and flexible</p>	<p>VITAL 115</p> <p>Precision dexterity in non-aggressive environments. Colour-coding to increase safety</p>	<p>VITAL 210</p> <p>The effective response to contact with aggressive detergents</p>	<p>VITAL 180</p> <p>Dexterity and better resistance to oils and greases</p>								
<p>Internal finish Textile support</p> <p>External finish Pebbled</p> <p>Size 9 10</p> <p>Length 35 cm</p> <p>Thickness 1.20 mm</p>	<p>Internal finish Textile support</p> <p>External finish Pebbled</p> <p>Size 8 9 10</p> <p>Length 30 cm</p> <p>Thickness 1.35 mm</p>	<p>Internal finish 175: Easy donning treatment 177: chlorinated</p> <p>External finish Non-slip embossed</p> <p>Size 6 7 8 9 10</p> <p>Length 31 cm</p> <p>Thickness 0.40 mm</p>	<p>Internal finish Powdered</p> <p>External finish 520: Smooth 540: Non-slip grip</p> <p>Size 520: 6 7 8 9 540: 8 9 10</p> <p>Length 520: 33 cm 540: 31 cm</p> <p>Thickness 0.40 mm</p>	<p>Internal finish Flocked</p> <p>External finish Non-slip embossed</p> <p>Size 7 8 9 10</p> <p>Length 30 cm</p> <p>Thickness 0.29 mm</p>	<p>Internal finish Flocked</p> <p>External finish Non-slip embossed</p> <p>Size Vital 115: 6 7 8 9 Vital 117, 124, 185, 186: 6 7 8 9 10</p> <p>Length 30.5 cm</p> <p>Thickness 0.35 mm</p>	<p>Internal finish Flocked</p> <p>External finish Non-slip embossed</p> <p>Size 6 7 8 9</p> <p>Length 32 cm</p> <p>Thickness 0.50 mm</p>	<p>Internal finish Flocked</p> <p>External finish 180: Non-slip embossed 181: Pebbled</p> <p>Size 180: 6 7 8 9 10 181: 7 8 9</p> <p>Length 180: 30 cm 181: 31 cm</p> <p>Thickness 0.40 mm</p>								
<p>CAT 3</p> <p>EN 388</p> <p>3131X</p> <p>EN ISO 374-1 TYPE B</p> <p>KPT</p>		<p>CAT 3</p> <p>EN 388</p> <p>4121X</p> <p>EN ISO 374-5</p> <p>EN ISO 374-1 TYPE A</p> <p>KLMNPT</p>		<p>CAT 3</p> <p>EN 388</p> <p>0010X</p> <p>EN ISO 374-1 TYPE B</p> <p>KPT</p> <p>EN 421</p> <p>VIRUS* (*VITAL 175)</p>		<p>CAT 3</p> <p>EN 388</p> <p>2010X (VITAL 520) 0010X (VITAL 540)</p> <p>EN 421</p> <p>KMP (VITAL 520) KPT (VITAL 540)</p>		<p>CAT 1</p>		<p>CAT 3</p> <p>EN 421</p> <p>EN ISO 374-1 TYPE B</p> <p>KPT</p> <p>EN ISO 374-5</p> <p>VIRUS</p> <p>EN 388</p> <p>0010X</p>		<p>CAT 3</p> <p>EN 421</p> <p>EN ISO 374-1 TYPE B</p> <p>1110X</p> <p>EN 388</p> <p>1110X</p> <p>EN ISO 374-5</p> <p>KPS</p>		<p>CAT 3</p> <p>EN 388</p> <p>1110X</p> <p>EN ISO 374-1 TYPE B</p> <p>KPT</p> <p>EN ISO 374-5</p> <p>EN 421</p> <p>*only for 180</p>	

CHEMICAL PROTECTION

REUSABLE: ALTO - JERSETTE RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1

RISK

Combination between contact time and the aggressiveness of the chemical being handled.

Choose the performance of your gloves based on the type of risk:

splashes

Chemical substances diluted by immersion or splashes of aggressive substances

frequent contact

Pure or mixed chemical substances in frequent contact

prolonged contact (or immersion)

Pure or mixed chemical substances in frequent contact

2

WEAR TIME

Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

short wear

Chlorinated interior finish

intermittent wear






































Flocked interior finish

continuous wear

Fabric-lined interior finish

ultra-comfort wear

MAPA exclusive technology providing greater flexibility

MATERIAL LATEX		MATERIAL LATEX MIX		MATERIAL LATEX	
 frequent CONTACT					
 intermittent WEAR			 continuous WEAR		
ALTO 258	ALTO 405	ALTO 415	JERSETTE 307	JERSETTE 300	
					
Strong protection against aggressive detergents	Biocide treated glove to avoid cross contamination by bacteria and viruses	Fine touch for light chemical protection	Exceptional comfort and precision dexterity in light aggressive environments	Maximum comfort for long-term work in aggressive environments	
Internal finish Flocked	Internal finish Flocked	Internal finish Flocked	Internal finish Textile support	Internal finish Textile support	
External finish Non-slip embossed	External finish Non-slip embossed	External finish Non-slip embossed	External finish Pebbled	External finish 300/308: Smooth 301: Pebbled	
Size 6 7 8 9 10	Size 6 7 8 9 10	Size 6 7 8 9 10 11	Size 6 7 8 9	Size 5 6 7 8 9 10 308: 6 7 8 9 10	
Length 32 cm	Length 33 cm	Length 32 cm	Length 31 cm	Length 30-32 cm	
Thickness 0.60 mm	Thickness 0.70 mm	Thickness 0.60 mm	Thickness 0.75 mm	Thickness 1.15 mm	
CAT 3		CAT 3		CAT 3	
 EN 388 1110X	 EN ISO 374-1 TYPE B KPS	 EN 388 2110X	 EN ISO 374-1 TYPE B KMT	 EN 388 1011X	 EN ISO 374-1 TYPE B KMT
 EN ISO 374-5		 EN ISO 374-5 VIRUS		 EN ISO 374-5	
 EN 421		 EN 421		 EN 407: 2020 X1XXXX	
 EN 407: 2020 X1XXXX		 EN 388 2120X		 EN 388 2131X	
 EN 407: 2020 X1XXXX		 EN 407: 2020 X1XXXX		 EN 407: 2020 X1XXXX	
 		 		 	
 x1  x10  x100		 x1  x5  x50			

CHEMICAL PROTECTION

REUSABLE: HARPON - ALTO RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 RISK
Combination between contact time and the aggressiveness of the chemical being handled.
Choose the performance of your gloves based on the type of risk:

- splashes**
Chemical substances diluted by immersion or splashes of aggressive substances
- frequent contact**
Pure or mixed chemical substances in frequent contact
- prolonged contact (or immersion)**
Pure or mixed chemical substances in frequent contact

2 WEAR TIME
Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

- short wear**
Chlorinated interior finish
- intermittent wear**
Flocked interior finish
- continuous wear**
Fabric-lined interior finish
- ultra-comfort wear**
MAPA exclusive technology providing greater flexibility

MATERIAL LATEX				
frequent CONTACT		prolonged CONTACT		
continuous WEAR	short WEAR		intermittent WEAR	
<p>HARPON 321</p> <p>Comfort and safety when gripping heavy, rough or slippery objects in highly-aggressive settings</p>	<p>ALTO 298</p> <p>Good mechanical performance for long-lasting chemical protection</p>	<p>ALTO 285</p> <p>Good mechanical performance for long-lasting chemical protection</p>	<p>ALTO 260</p> <p>A good choice when dexterity and chemical protection is needed for extended wear</p>	<p>ALTO 299</p> <p>Good mechanical performance for long-lasting chemical protection</p>
<p>Internal finish Textile support</p> <p>External finish Reinforced grip</p> <p>Size 321: 6 7 8 9 10 325: 8 9 10</p> <p>Length 321: 32 cm 325: 37 cm</p> <p>Thickness 1.35 mm</p>	<p>Internal finish Chlorinated</p> <p>External finish Smooth</p> <p>Size 8 9 10</p> <p>Length 43 cm</p> <p>Thickness 1.05 mm</p>	<p>Internal finish Chlorinated</p> <p>External finish Reinforced grip</p> <p>Size 8 9 10</p> <p>Length 60 cm</p> <p>Thickness 1 mm</p>	<p>Internal finish Flocked</p> <p>External finish Non-slip embossed</p> <p>Size 7 8 9 10 11</p> <p>Length 32 cm</p> <p>Thickness 0.80 mm</p>	<p>Internal finish Flocked</p> <p>External finish Non-slip embossed</p> <p>Size 7 8 9 10</p> <p>Length 31 cm</p> <p>Thickness 0.90 mm</p>
CAT 3				
x1 x5 x50	x1 x5 x50	x1 x30	x1 x10 x50	x1 x5 x50

CHEMICAL PROTECTION REUSABLE: ULTRANITRIL RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 RISK

Combination between contact time and the aggressiveness of the chemical being handled.
Choose the performance of your gloves based on the type of risk:

- splashes**
Chemical substances diluted by immersion or splashes of aggressive substances
- frequent contact**
Pure or mixed chemical substances in frequent contact
- prolonged contact (or immersion)**
Pure or mixed chemical substances in frequent contact

2 WEAR TIME

Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

- short wear**
Chlorinated interior finish
- intermittent wear**
Flocked interior finish
- continuous wear**
Fabric-lined interior finish
- ultra-comfort wear**
MAPA exclusive technology providing greater flexibility

MATERIAL PVC / NITRILE		MATERIAL NITRILE				
frequent CONTACT		splashes		frequent CONTACT		
ultra-comfort WEAR		short WEAR		intermittent WEAR		
ULTRANITRIL 410 Cut and Chemical protection with better degradation performance against acids	ULTRANITRIL 472 Fingertip precision for light chemical protection and food handling	ULTRANITRIL 454 Precision dexterity in mildly aggressive environments, for those sensitive to natural latex	ULTRANITRIL 475 Good sensitivity for standard chemical protection	ULTRANITRIL 485* Good sensitivity for standard chemical protection	ULTRANITRIL 495 Good mechanical resistance and long-lasting chemical protection	ULTRANITRIL 492* Good mechanical resistance and long-lasting chemical protection
Internal finish High-visibility yellow seamless knitted textile support in composite fibres External finish Reinforced grip Size 7 8 9 10 11 Length 35 cm Thickness 1.70 mm	Internal finish Easy donning treatment External finish Pebbled Size 6 7 8 9 10 Length 31 cm Thickness 0.20 mm	Internal finish Flocked External finish Non-slip embossed Size 6 7 8 9 10 Length 31 cm Thickness 0.35 mm	Internal finish Flocked External finish Non-slip embossed Size 6 7 8 9 10 Length 31 cm Thickness 0.34 mm	Internal finish Flocked External finish Non-slip embossed Size 7 8 9 10 Length 31 cm Thickness 0.34 mm	Internal finish Flocked External finish Non-slip embossed Size 6 7 8 9 10 Length 32 cm Thickness 0.41 mm	Internal finish Flocked External finish Non-slip embossed Size 492: 6 7 8 9 10 11 491: 6 7 8 9 10 Length 492: 32 cm 491: 37 cm Thickness 492: 0.38 mm 491: 0.41 mm
CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3
EN 388 4X31C EN ISO 374-1 TYPE A KLMNPT EN 407: 2020 X1XXXX	EN 388 2101X EN ISO 374-1 TYPE B JOT EN ISO 374-5 VIRUS EN 421	EN 388 2000X EN ISO 374-1 TYPE B KPT EN ISO 374-5	EN 388 3001X EN ISO 374-1 TYPE B JOT EN ISO 374-5	EN 388 3101X EN ISO 374-1 TYPE B JKOPT EN ISO 374-5 ISO 18889 G2	EN 388 3101X EN ISO 374-1 TYPE A AJKOPT EN ISO 374-5	EN 388 3101X EN ISO 374-1 TYPE A AJKOPT EN ISO 374-5 ISO 18889 G2
x12 x48	x10 x100	x1 x50	x1 x12 x72	x12 x72	x1 x10 x100	x1 x10 x100

CHEMICAL PROTECTION REUSABLE: ULTRANITRIL RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 RISK

Combination between contact time and the aggressiveness of the chemical being handled.
Choose the performance of your gloves based on the type of risk:

- splashes**
Chemical substances diluted by immersion or splashes of aggressive substances
- frequent contact**
Pure or mixed chemical substances in frequent contact
- prolonged contact (or immersion)**
Pure or mixed chemical substances in frequent contact

2 WEAR TIME

Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

- short wear**
Chlorinated interior finish
- intermittent wear**
Flocked interior finish
- continuous wear**
Fabric-lined interior finish
- ultra-comfort wear**
MAPA exclusive technology providing greater flexibility

MATERIAL NITRILE			
frequent CONTACT		prolonged CONTACT	
ultra-comfort WEAR	short WEAR	intermittent WEAR	continuous WEAR
ULTRANITRIL 381 Maximum comfort for standard chemical protection	ULTRANITRIL 480* Ultra-long chemical protection	ULTRANITRIL 493* Ultra-long chemical protection	ULTRANITRIL 377 Comfort and reinforced mechanical resistance for long-lasting chemical protection
Internal finish Textile support External finish Non-slip embossed Size 7 8 9 10 11 Length 36 cm Thickness 0.95 mm	Internal finish Chlorinated External finish Non-slip embossed Size 7 8 9 10 11 Length 46 cm Thickness 0.55 mm *See food compatibility chart, p. 56	Internal finish Flocked External finish Non-slip embossed Size 8 9 10 11 Length 39 cm Thickness 0.55 mm	Internal finish Textile support External finish Smooth Size 8 9 10 Length 38 cm Thickness 1.35 mm
CAT 3		CAT 3	
EN 388 3111A EN ISO 374-1 TYPE A AJKLOPT EN 407: 2020 X1XXXX EN ISO 374-5 ISO 18889 G2	EN 388 4102X EN ISO 374-1 TYPE A AJKOPT EN ISO 374-5 ISO 18889 G2	EN 388 4102X EN ISO 374-1 TYPE A AJKOPT EN ISO 374-5 ISO 18889 G2	EN 388 4122X EN ISO 374-1 TYPE A AJKOPT EN 407: 2020 X1XXXX
x12 x72	x1 x12	x1 x10 x50	x1 x5 x50

CHEMICAL PROTECTION REUSABLE: ULTRANEEO RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 RISK

Combination between contact time and the aggressiveness of the chemical being handled.
Choose the performance of your gloves based on the type of risk:

- splashes**
Chemical substances diluted by immersion or splashes of aggressive substances
- frequent contact**
Pure or mixed chemical substances in frequent contact
- prolonged contact (or immersion)**
Pure or mixed chemical substances in frequent contact

2 WEAR TIME

Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

- short wear**
Chlorinated interior finish
- intermittent wear**
Flocked interior finish
- continuous wear**
Fabric-lined interior finish
- ultra-comfort wear**
MAPA exclusive technology providing greater flexibility

MATERIAL POLYCHLOROPRENE (NEOPRENE)						
splashes		frequent CONTACT			prolonged CONTACT	
intermittent WEAR	continuous WEAR	intermittent WEAR	continuous WEAR	ultra-comfort WEAR	short WEAR	continuous WEAR
ULTRANEEO 401	ULTRANEEO 340	ULTRANEEO 420	ULTRANEEO 341	ULTRANEEO 382	ULTRANEEO 407	ULTRANEEO 339
Tactile sensitivity for light chemical protection	Comfort with light chemical protection	Suppleness and freedom of movement for standard chemical protection	Comfort with standard chemical protection	Maximum comfort for standard chemical protection	Ultra-high performance chemical protection	Comfort and high chemical protection
Internal finish Flocked	Internal finish Textile support	Internal finish Flocked	Internal finish Textile support	Internal finish Textile support	Internal finish Chlorinated	Internal finish Textile support
External finish Non-slip embossed	External finish Smooth	External finish Non-slip embossed	External finish Smooth	External finish Non-slip embossed	External finish Non-slip embossed	External finish Pebbled
Size 6 7 8 9 10 11	Size 7 8 9 10	Size 420: 6 7 8 9 10 450: 7 8 9 10	Size 8 9 10 11	Size 6 7 8 9 10	Size 9 10	Size 9 10
Length 31-32 cm	Length 38 cm	Length 420: 31-32 cm 450: 41 cm	Length 38 cm	Length 36 cm	Length 407: 35 cm 414: 46 cm	Length 36 cm
Thickness 0.55 mm	Thickness 1.33 mm	Thickness 0.75 mm	Thickness 1.45 mm	Thickness 0.95 mm	Thickness 0.75 mm	Thickness 1.6 mm
CAT 3		CAT 3			CAT 3	
EN 388 2110X	EN ISO 374-1 TYPE A ALMNST	EN 388 2121X	EN ISO 374-1 TYPE A ALMNST	EN 388 2121X	EN ISO 374-1 TYPE A ALMNST	EN 388 3121X
	EN ISO 374-5 X1XXXX		EN ISO 374-5 X1XXXX		EN ISO 374-5 X1XXXX	
	EN 407: 2020		EN 407: 2020		EN ISO 374-5	EN 407: 2020
x1	x10	x1	x10	x1	x6	x1
x100	x5	x100	x50	x72	x48	x6

CHEMICAL PROTECTION

REUSABLE: BUTOFLEX - FLUOTECH RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 RISK

Combination between contact time and the aggressiveness of the chemical being handled.

Choose the performance of your gloves based on the type of risk:

splashes

Chemical substances diluted by immersion or splashes of aggressive substances

frequent contact

Pure or mixed chemical substances in frequent contact

prolonged contact (or immersion)

Pure or mixed chemical substances in frequent contact

2 WEAR TIME

Identifies the comfort level required by the operator the longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

short wear

Chlorinated interior finish

intermittent wear

Flocked interior finish

continuous wear

Fabric-lined interior finish

ultra-comfort wear

MAPA exclusive technology providing greater flexibility

MATERIAL BUTYL	
 short WEAR	 ultra-comfort WEAR
<p>BUTOFLEX 651</p>  <p>Ultimate specific chemical resistance</p>	<p>BUTOFLEX 650</p>  <p>Ultimate specific chemical resistance</p>
<p>Internal finish Powder free</p> <p>External finish Non-slip embossed</p> <p>Size 7 8 9 10</p> <p>Length 37 cm</p> <p>Thickness 0.50 mm</p>	<p>Internal finish Textile support</p> <p>External finish Non-slip embossed</p> <p>Size 7 8 9 10 11</p> <p>Length 35 cm</p> <p>Thickness 1.45 mm</p>
CAT 3	CAT 3
<p>EN 388  0010X</p> <p>EN ISO 374-1 TYPE A  ABCILMNOS</p> <p>EN ISO 374-5 </p> <p>EN 16350 </p>	<p>EN 388  1121X</p> <p>EN ISO 374-1 TYPE A  ABCILMNOS</p> <p>EN ISO 374-5 </p>
    	
 x1  x25	

MATERIAL FLUROELASTOMER	
 short WEAR	 continuous WEAR
<p>FLUOTECH 468</p>  <p>Tactile sensitivity with wear indicator</p>	<p>FLUOTECH 344</p>  <p>Comfort and flexibility for extended wear</p>
<p>Internal finish Chlorinated</p> <p>External finish Smooth</p> <p>Size 8 9 10</p> <p>Length 30 cm</p> <p>Thickness 0.51 mm</p>	<p>Internal finish Textile support</p> <p>External finish Smooth</p> <p>Size 9 10</p> <p>Length 37 cm</p> <p>Thickness 1.60 mm</p>
CAT 3	CAT 3
<p>EN 388  3102X</p> <p>EN ISO 374-1 TYPE A  ADEFGLJMNO</p> <p>EN ISO 374-5 </p>	<p>EN 388  3121X</p> <p>EN ISO 374-1 TYPE A  ACDEFGJLMN</p> <p>EN 407: 2020  X1XXXX</p> <p>EN ISO 374-5 </p>
    	
 x1  x1	

CHEMICAL PROTECTION DISPOSABLE: SOLO RANGE

MAPA Professional offers a range of disposable gloves to meet your needs regardless of your working environment. The use of different polymers optimises the ergonomics and performance of the gloves: flexibility, resistance and comfort.



DISPOSABLE GLOVES

There are several advantages of disposable gloves:

- **Freedom of movement**
- **Protection for hands and the products being handled**
- **Rolled cuff to prevent tearing while ensuring the glove stays in place on the arm**

4 ADDITIONAL CRITERIA TO REFINE YOUR CHOICE

1 POLYMERS

PVC
Mechanical strength and price.

LATEX
Flexibility and comfort.

NITRILE (next page)
Mechanical resistance and resistance to oils.

TRIPOLYMER (next page)
Flexibility, mechanical strength and chemical resistance to splashes.

2 COMFORT AND FLEXIBILITY

The various interior finishes (powdered/chlorinated) make it possible to adapt to the type of application and the specific requirements of the wearer.

POWDERED
Better sweat absorption.

CHLORINATED
Easy donning and no powder on hands.































































EASY DONNING TREATMENT
Makes it easier to don and doff gloves, without increasing the thickness and without using powder.
Reduces the allergy risk of natural latex gloves.

3 COLOUR

The use of different colours is in response to the unique demands of certain sectors and it enables visual checks by allocating a specific colour to each application.

4 DIMENSIONS

Choosing the length and thickness of the glove makes it possible to factor in the limitations related to the workstation: dexterity, resistance and forearm protection.

POLYMER PVC / VINYL		POLYMER NITRILE / VINYL		POLYMER NATURAL LATEX			
COMFORT POWDER FREE		COMFORT POWDER FREE		COMFORT POWDER FREE		COMFORT POWDERED	
SOLO 990		SOLO BLACK 935		SOLO 998		SOLO PLUS 995	SOLO 988
							
The best value for precise movements		Suppleness and optimal resistance		Good protection with optimal flexibility and dexterity		Optimal flexibility and dexterity	Optimal comfort for light food handling
External finish Smooth		External finish Smooth		External finish Smooth with pebbled fingertips		External finish Smooth with pebbled fingertips	External finish Smooth
Size 6 7 8 9		Size 6 7 8 9		Size 6 7 8 9		Size 6 7 8 9	Size 6 7 8 9
Length 24 cm		Length 24 cm		Length 30 cm		Length 24 cm	Length 24 cm
Thickness 0.07 mm		Thickness 0.08 mm		Thickness 0.20 mm		Thickness 0.10 mm	Thickness 0.08 mm
 *See food compatibility chart, p. 56		 *See food compatibility chart, p. 56		 *See food compatibility chart, p. 56		 *See food compatibility chart, p. 56	 *See food compatibility chart, p. 56
CAT 3		CAT 3		CAT 3		CAT 3	CAT 3
EN ISO 374-1 TYPE C	EN ISO 374-5	EN ISO 374-1 TYPE C	EN ISO 374-5	EN ISO 374-1 TYPE C	EN ISO 374-5	EN ISO 374-1 TYPE C	EN ISO 374-5
							
VIRUS							
     		      		      		      	      
 x100 gloves  x1,000 gloves		 x100 gloves  x1,000 gloves		 x100 gloves  x1,000 gloves		 x100 gloves  x1,000 gloves	 x100 gloves  x1,000 gloves

CHEMICAL PROTECTION

DISPOSABLE: SOLO - TRILITES RANGE

MAPA Professional offers a range of disposable gloves to meet your needs regardless of your working environment. The use of different polymers optimises the ergonomics and performance of the gloves: flexibility, resistance and comfort.



DISPOSABLE GLOVES

There are several advantages of disposable gloves:

- **Freedom of movement**
- **Protection for hands and the products being handled**
- **Rolled cuff to prevent tearing while ensuring the glove stays in place on the arm**

4 ADDITIONAL CRITERIA TO REFINE YOUR CHOICE

1 POLYMERS

PVC (previous page)
Mechanical strength and price.

LATEX (previous page)
Flexibility and comfort.

NITRILE
Mechanical resistance and resistance to oils.

TRIPOLYMER
Flexibility, mechanical strength and chemical resistance to splashes.

2 COMFORT AND FLEXIBILITY

The various interior finishes (powdered/chlorinated) make it possible to adapt to the type of application and the specific requirements of the wearer.

POWDERED
Better sweat absorption.

CHLORINATED
Easy donning and no powder on hands.


































EASY DONNING TREATMENT
Makes it easier to don and doff gloves, without increasing the thickness and without using powder.
Reduces the allergy risk of natural latex gloves.

3 COLOUR

The use of different colours is in response to the unique demands of certain sectors and it enables visual checks by allocating a specific colour to each application.

4 DIMENSIONS

Choosing the length and thickness of the glove makes it possible to factor in the limitations related to the workstation: dexterity, resistance and forearm protection.

POLYMER NITRILE				POLYMER TRIPOLYMER
COMFORT CHLORINATED				COMFORT CHLORINATED
SOLO 967  <p>Excellent dexterity due to the flexibility and thinness of the material. Supplied in bags or boxes (Solo BOX 967)</p>	SOLO 977  <p>Ideal splash protection for use in the chemical industry</p>	SOLO 999  <p>Excellent mechanical resistance, ideal in oily environments</p>	SOLO 987  <p>The perfect protection for light handling in oily environments</p>	TRILITES 994  <p>Tripolymer formula for protection against chemical splashes and splatters</p>
Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 Length 25 cm Thickness 0.07 mm	Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 10 Length 24 cm Thickness 0.12 mm	Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 Length 29-30 cm Thickness 0.10 mm	Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 Length 24 cm Thickness 0.10 mm	Internal finish Chlorinated External finish Pebbled Size 6 7 8 9 Length 25 cm Thickness 0.15 mm
 *See food compatibility chart, p. 56 CAT 3	CAT 3	 *See food compatibility chart, p. 56 CAT 3	 *Only 997, see food compatibility chart, p. 56 CAT 3	CAT 3
EN ISO 374-1 TYPE C  EN ISO 374-5 	EN ISO 374-1 TYPE B  EN ISO 374-5  ISO 18889  G1 JKT	EN ISO 374-1 TYPE B  EN ISO 374-5  VIRUS	EN ISO 374-1 TYPE B  EN ISO 374-5  VIRUS	EN ISO 374-1 TYPE B  EN ISO 374-5  KPT
      				  
 x100 gloves  x1,000 gloves				 x100 gloves  x1,000 gloves

MECHANICAL PROTECTION HANDLING PROTECTION: ULTRANE RANGE

The Mapa Professional Handling Protection range meets requirements for hand comfort and protection when carrying out a wide variety of work.



PRECISION WORK

The **ULTRANE** range represents all that is needed for precision work requiring a high-level of dexterity while maintaining a sense of touch when handling small or delicate parts.

- Ease of movement (comfort)
- Service life suitable for daily use
- Suitable for different environments (dry, wet, oily, greasy, dirty, etc.)
- Superior performance in slippery settings for certain products

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- ☉ **dry** and **relatively clean** environments
- 🛢️ **oily** and **very dirty** environments

2 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and to the adhesion and nature of the fabric in a given environment.

- 🕒 **short** service life
- 🕒 **long** service life
- 🕒 **high-performance** service life

PRECISION WORK

ENVIRONMENT
☉ **dry and relatively clean**

🕒 **short**
SERVICE LIFE

🕒 **long**
SERVICE LIFE

ULTRANE 548		ULTRANE 648		ULTRANE 524		ULTRANE 551		ULTRANE 510		ULTRANE 681	
Optimal dexterity and sensitivity offering light protection		Optimal dexterity and sensitivity offering light protection. Suitable for touch screens		Protection of electronic device from ElectroStatic Discharge (ESD)		Unbeatable for fingertip precision		Optimal comfort, high level of breathability and durability for precision work		Second skin effect for optimal comfort and dexterity thanks to its 18 gauge	
Liner Seamless knitted textile support Gauge 13 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size Ultrane 548 5 6 7 8 9 10 11 Ultrane 549 5 6 7 8 9 10 Length 20-27 cm		Liner Seamless textile support Gauge 13 Coating Ventilated back Polyurethane coating on palm and fingers Cuff Knitted wrist Size 5 6 7 8 9 10 11 Length 21-27 cm		Liner Seamless textile with conductive fibres Gauge 18 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 22-27 cm Washable x1		Liner Seamless knitted textile support Gauge 13 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size Ultrane 551 5 6 7 8 9 10 11 Ultrane 550/550 VM 5 6 7 8 9 10 Length 20-27 cm		Liner Seamless knitted textile support Gauge 13 Coating Polymer coating with aqueous base on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 22-27 cm Washable x1		Liner Seamless knitted textile support Gauge 18 Coating Foam nitrile coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 23-28 cm Washable x1	
CAT 2 EN 388 3121X		CAT 2 EN 388 3121X		CAT 2 EN 388 2X20A EN 16350		CAT 2 EN 388 4131X		CAT 3 EN 388 4131X		CAT 2 EN 388 4X21A ISO 13997: 4.9N	

MECHANICAL PROTECTION

HANDLING PROTECTION:

ULTRANE RANGE



PRECISION WORK

The **ULTRANE** range represents all that is needed for precision work requiring a high-level of dexterity while maintaining a sense of touch when handling small or delicate parts.

- Ease of movement (comfort)
- Service life suitable for daily use
- Suitable for different environments (dry, wet, oily, greasy, dirty, etc.)
- Superior performance in slippery settings for certain products

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- ☐ **dry** and **relatively clean** environments
- ☑ **oily** and **very dirty** environments

2 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and to the adhesion and nature of the fabric in a given environment.

- ⌚ **short** service life
- ⌚ **long** service life
- ⌚ **high-performance** service life

PRECISION WORK

ENVIRONMENT
dry and relatively clean

ENVIRONMENT
oily and very dirty

high-performance
SERVICE LIFE

ULTRANE 527	ULTRANE 541	ULTRANE 544	ULTRANE 552	ULTRANE 553	ULTRANE 500*
<p>RESICOMFORT TECHNOLOGY PATENT PENDING TECHNOLOGY</p>	<p>RESICOMFORT TECHNOLOGY VENDING MACHINE Touch Screen</p>	<p>Touch Screen</p>	<p>Touch Screen *available from Q2 2023</p>	<p>VENDING MACHINE</p>	<p>GRIP & PROOF TECHNOLOGY VENDING MACHINE ULTRANE 525* ULTRANE 526*</p>
<p>Detachable fingers to prevent entanglement. Comfort, suppleness and high dexterity without compromising breathability and durability</p>	<p>Comfort, suppleness and high dexterity without compromising breathability and durability</p>	<p>Protection of electronic device from ElectroStatic Discharge (ESD)</p>	<p>Our first eco-friendly handling glove made of recycled fibres*. High dexterity and comfort for general purpose work</p>	<p>Unbeatable for fingertip precision in dirty environments</p>	<p>Assured grip, skin protected and excellent dexterity in lightly oily/dirty environments</p>
<p>Liner Seamless textile with patent pending specific knitting technology by MAPA PROFESSIONAL</p> <p>Gauge 15</p> <p>Coating Foam nitrile coating with sandy finish on palm and fingers</p> <p>Cuff Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 22-28 cm</p> <p>Washable x1</p>	<p>Liner Seamless knitted textile support</p> <p>Gauge 15</p> <p>Coating Foam nitrile coating with sandy finish on palm and fingers</p> <p>Cuff Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 22-28 cm</p> <p>Washable x1</p>	<p>Liner Seamless textile with conductive fibres</p> <p>Gauge 15</p> <p>Coating Foam nitrile conductive coating on palm and fingers</p> <p>Cuff Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 22-27 cm</p> <p>Washable x1</p>	<p>Liner Seamless knitted textile support made of *39% recycled polyester and 44% virgin polyester</p> <p>Gauge 15</p> <p>Coating Foam nitrile coating</p> <p>Cuff Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 21-27 cm</p>	<p>Liner Seamless knitted textile support</p> <p>Gauge 13</p> <p>Coating Nitrile coating on palm and fingers</p> <p>Cuff Knitted wrist</p> <p>Size 5 6 7 8 9 10</p> <p>Length 22-26 cm</p>	<p>Liner Seamless knitted textile support</p> <p>Gauge 13</p> <p>Coating Double layer coating: Smooth nitrile - Sandy Nitrile Ultran 500 palm and fingers Ultran 525 3/4 coating Ultran 526 complete coating</p> <p>Size Ultran 500/ 525 : 6 7 8 9 10 11 Ultran 526 : 7 8 9 10 11</p> <p>Length 21-27 cm</p> <p>Washable x3</p>
<p>OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 CO 9792/2/PTM Tested for harmful substances. www.oeko-tex.com/standard100</p>	<p>OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 CO 9792/2/PTM Tested for harmful substances. www.oeko-tex.com/standard100</p> <p>*Only 541, see food compatibility chart, p. 56</p>	<p>OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 CO 9792/2/PTM Tested for harmful substances. www.oeko-tex.com/standard100</p>	<p>OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 CO 9792/2/PTM Tested for harmful substances. www.oeko-tex.com/standard100</p>	<p>OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 CO 9792/2/PTM Tested for harmful substances. www.oeko-tex.com/standard100</p>	<p>OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 CO 9792/2/PTM Tested for harmful substances. www.oeko-tex.com/standard100</p>
<p>CAT 2</p> <p>EN 388 31X1A EN 407: 2020 X1XXXX</p>	<p>CAT 2</p> <p>EN 388 4121A EN 407: 2020 X1XXXX</p>	<p>CAT 2</p> <p>EN 388 4121A EN 16350</p>	<p>CAT 2</p> <p>EN 388 4X11A</p>	<p>CAT 2</p> <p>EN 388 4121X</p>	<p>CAT 3</p> <p>EN 388 4121A ISO 18889 GR EN 407: 2020 X1XXXX</p>
<p>🏭 🚗 ✈️</p>	<p>🏭 ⚡ 🧹 🚗</p>	<p>🏭 🚗 ✈️</p>	<p>🏭 ✈️ ⚡ 🧹</p>	<p>🏭 ⚡ 🧹 🚗 🚜</p>	<p>🏭 ⚡ 🧹 🚗 🚜</p>
<p>🧤 x1 🧤 x12 📦 x96</p>	<p>🧤 Only 641 x1 🧤 x12 📦 x96</p>	<p>🧤 x1 🧤 x12 📦 x96</p>	<p>🧤 x1 📦 x48</p>	<p>🧤 x1 🧤 x10 📦 x100</p>	<p>🧤 x1 🧤 x12 📦 x96</p>

MECHANICAL PROTECTION

HANDLING PROTECTION:

TITAN RANGE

HEAVY-DUTY WORK

The **TITAN** range provides the hands with armour for protection when handling heavy objects

- Easy to don and doff gloves
- Ease of movement and gripping
- Service life suitable for daily use
- Suitable for different environments (dry, wet, oily, greasy, dirty, etc.)
- Superior performance in slippery settings for certain products



HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- ☐ **dry** and **relatively clean** environments
- ☑ **oily** and **very dirty** environments
- ☑ **wet** environments

2 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and to the adhesion and nature of the fabric in a given environment.

- ⌚ **short** service life
- ⌚ **long** service life
- ⌚ **high-performance** service life

HEAVY-DUTY WORK



TITAN 833



Comfort and dexterity for common tasks

TITAN 375



Protection for all types of light handling activities

TITAN 383



Protection for all types of light handling activities

TITAN 397



Comfort and dexterity for common handling tasks

TITAN 388



Comfort and durability for heavy-duty handling

Liner
Textile support

Coating
3/4 nitrile coating

Size
7 8 9 10

Length
26-31 cm

Liner
Textile support

Coating
Full nitrile coating

Cuff
Scalloped cut

Size
6 7 8 9

Length
27 cm

Liner
Textile support

Coating
Full nitrile coating

Cuff
Knitted

Size
7 8 9 10

Length
27-30 cm

Liner
Textile support

Coating
3/4 nitrile coating

Cuff
Knitted

Size
6 7 8 9 10

Length
24-31 cm

Liner
Textile support

Coating
Full nitrile coating

Cuff
Safety cuff

Size
8 9 10

Length
25-27 cm

CAT 2



CAT 2



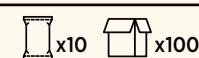
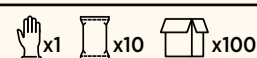
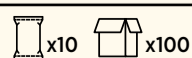
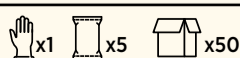
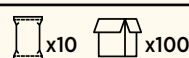
CAT 2



CAT 2



CAT 2



MECHANICAL PROTECTION HANDLING PROTECTION: TITAN - HARPON RANGE



HEAVY-DUTY WORK

The TITAN/HARPON range provides the hands with armour for protection when handling heavy objects

- Easy to don and doff gloves
- Ease of movement and gripping
- Service life suitable for daily use
- Suitable for different environments (dry, wet, oily, greasy, dirty, etc.)
- Superior performance in slippery settings for certain products

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

2 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and to the adhesion and nature of the fabric in a given environment.

- short** service life
- long** service life
- high-performance** service life

HEAVY-DUTY WORK



TITAN 328



Flexibility and grip for common handling tasks

HARPON 319



Comfort, reinforced safety and excellent grip in wet environments

HARPON 330



TITAN 850



Shock absorption, durability and comfort for heavy handling work

Liner
Seamless knitted textile support

Gauge 10

Coating
Natural latex anti-slip coating on palm and fingers
Embossed, anti-slip texture

Cuff
Knitted

Size
8 9 10

Length
25-27 cm

Liner
Textile support

Coating
Fully coated in natural latex
Embossed, anti-slip texture

Cuff
Knitted

Size
7 8 9

Length
25-28 cm

Liner
Textile support

Coating
3/4 coating in natural latex
Embossed, anti-slip texture

Cuff
Knitted

Size
6 7 8 9

Length
25-28 cm

Liner
Seamless knitted textile support

Gauge 13

Coating
Nitrile coating on the palm and fingers
Double layer coating:
Smooth nitrile - Sandy Nitrile

Size
7 8 9 10 11

Length
25-28 cm

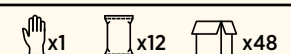
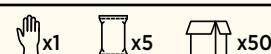
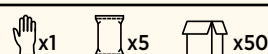
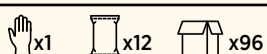
CAT 2



CAT 2



CAT 2



MECHANICAL PROTECTION

CUT PROTECTION: KRYTECH RANGE

The Mapa Professional range of cut-protection gloves provides excellent hand comfort and protection specially designed for various types of work involving cut hazards.



PRECISION WORK

Select your cut-protection gloves according to your specific needs. For precision work, you need gloves that act like a second skin, protecting against cuts but maintaining excellent dexterity.

IMPORTANT

Using cut-protection gloves does not guarantee total protection (for instance, when using a cutting machine). Furthermore, the EN 388 and ISO 13997 test results give no more than an indicative average value, and an on-site study may be recommended to determine the most appropriate type of protection for a workstation. Do not hesitate to contact our technical department for further information.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

2 RISK

The higher the level of performance, the greater the glove's resistance to the combined effects of the sharpness of the object's cutting edge and the pressure applied.

- low** risk - ISO B
- moderate** risk - ISO C
- high** risk - ISO D
- very high** risk - ISO E

3 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and the nature of the fabric, in a given environment.

- short** service life
- long** service life
- high-performance** service life

dry and relatively clean
ENVIRONMENTS

low
RISK

short
SERVICE LIFE

long
SERVICE LIFE

KRYTECH 578		KRYTECH 579		KRYTECH 584		KRYTECH 557		KRYTECH 558		KRYTECH 609	
Light cut protection for very precise handling in clean and dirty environments		Light cut protection for very precise handling in reasonably clean environments				Light cut protection with crotch reinforcement for precise handling in reasonably clean environments				Light cut protection with high comfort, suppleness and durability for precision work even in dirty environments. With or without crotch reinforcement	
Liner Seamless knitted textile support in HDPE fibres Gauge 13 Coating Polyurethane coating Cuff Knitted wrist Size 6 7 8 9 10 11 Length 22-27 cm Washable x3		Liner Seamless textile support in HDPE fibres Gauge 13 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 22-27 cm Washable x5		Liner Seamless textile support in HDPE fibres Gauge 13 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 27-32 cm Washable x5		Liner Seamless textile support in HDPE fibres Gauge 13 Coating Polyurethane coating on the palm and fingers and nitrile crotch reinforcement between thumb and index Cuff Knitted wrist Size 6 7 8 9 10 11 Length Krytech 557 22-27 cm Krytech 558 28-32 cm Washable x5		Liner Seamless textile support in HDPE fibres Gauge 13 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 21-27 cm Washable x5		Liner Seamless knitted textile support in composite and HDPE fibres Gauge 13 Coating Polyurethane coating on palm and fingers Cuff Knitted wrist Size 5 6 7 8 9 10 11 Length 21-27 cm Washable x5	
CAT 2 EN 388 4X42B ISO 13997: 5N		CAT 2 EN 388 4342B ISO 13997: 5.3N		CAT 2 EN 388 4342B ISO 13997: 5.3N		CAT 2 EN 388 4343B ISO 13997: 5.3N		CAT 2 EN 388 4X42B ISO 13997: 9.5N		OEKO-TEX® STANDARD 100 CQ 979/2 97TH www.oeko-tex.com	
x1 x12 x48		x1 x12 x96		x1 x10 x50		x1 x12 x96		x1 x12 x48		x1 x12 x48	

MECHANICAL PROTECTION

CUT PROTECTION: KRYTECH RANGE

The Mapa Professional range of cut-protection gloves provides excellent hand comfort and protection specially designed for various types of work involving cut hazards.



PRECISION WORK

Select your cut-protection gloves according to your specific needs. For precision work, you need gloves that act like a second skin, protecting against cuts but maintaining excellent dexterity.

IMPORTANT

Using cut-protection gloves does not guarantee total protection (for instance, when using a cutting machine). Furthermore, the EN 388 and ISO 13997 test results give no more than an indicative average value, and an on-site study may be recommended to determine the most appropriate type of protection for a workstation. Do not hesitate to contact our technical department for further information.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

2 RISK

The higher the level of performance, the greater the glove's resistance to the combined effects of the sharpness of the object's cutting edge and the pressure applied.

- low** risk - ISO B
- moderate** risk - ISO C
- high** risk - ISO D
- very high** risk - ISO E

3 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and the nature of the fabric, in a given environment.

- short** service life
- long** service life
- high-performance** service life

dry and relatively clean ENVIRONMENTS

low RISK				moderate RISK		
long SERVICE LIFE		high-performance SERVICE LIFE		long SERVICE LIFE		high-performance SERVICE LIFE
KRYTECH 692 Touch Screen Crotch reinforcement High visibility Light cut protection with second skin effect for optimal comfort and dexterity thanks to its 18 gauge. High vision textile for reinforced safety	KRYTECH 563 Light cut protection and durability for precise handling in reasonably clean environments	KRYTECH 588 Cutting, grip and dexterity for dry and slightly oily environments	KRYTECH 642 RESICOMFORT TECHNOLOGY Touch Screen Comfort, suppleness and high dexterity without compromising on cut protection, breathability and durability	KRYTECH 610 Crotch reinforcement Moderate cut protection providing maximum comfort. A seamless plated knit glove providing a very good fit, dexterity and flexibility	KRYTECH 693 Touch Screen Crotch reinforcement High visibility Medium cut protection with second skin effect for optimal comfort and dexterity thanks to its 18 gauge. High vision textile for reinforced safety	KRYTECH 643 RESICOMFORT TECHNOLOGY Touch Screen Comfort, suppleness and high dexterity without compromising cut protection, breathability and durability
Liner Seamless knitted textile support in composite and HDPE fibres Gauge 18 Coating Foam nitrile coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 24-29 cm Washable x1	Liner Seamless textile support in HDPE fibres Gauge 13 Coating Nitrile coating on palm and fingertips Cuff Knitted wrist Size 7 8 9 10 11 Length 23-27 cm Thickness 1.4 mm	Liner Seamless textile support in HDPE fibres Gauge 13 Coating Nitrile coating with sandy finish on palm and fingers Cuff Knitted wrist Size 7 8 9 10 11 Length 23-27 cm Washable x5	Liner Seamless knitted textile support in composite and HDPE fibres Gauge 15 Coating Foam nitrile coating with sandy finish on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 23-28 cm Washable x1	Liner Seamless knitted textile support in composite and HDPE fibres Gauge 13 Coating Polyurethane coating on the palm and fingers 810: nitrile crotch reinforcement between thumb and index Cuff Knitted wrist Size 6 7 8 9 10 11 Length 23-28 cm Washable x3	Liner Seamless knitted textile support in composite and HDPE fibres Gauge 18 Coating Foam nitrile coating on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 24-29 cm Washable x1	Liner Seamless Knitted textile support in composite and HDPE fibres Gauge 15 Coating Foam nitrile coating with sandy finish on palm and fingers Cuff Knitted wrist Size 6 7 8 9 10 11 Length 23-28 cm Washable x1
CAT 2 EN 388 3X42B ISO 13997: 9.7N	CAT 2 EN 388 4343B ISO 13997: 6.5N	CAT 2 EN 388 4343B ISO 13997: 5.9N	CAT 2 EN 388 EN 407: 2020 4X42B X1XXXX ISO 13997: 5.7N	CAT 2 EN 388 4X43C ISO 13997: 14.9N	CAT 2 EN 388 4X42C ISO 13997: 14.5N	CAT 2 EN 388 EN 407: 2020 4X42C X1XXXX ISO 13997: 13.5N
x1 x12 x48	x1 x12 x96			x1 x12 x48		

MECHANICAL PROTECTION

CUT PROTECTION: KRYTECH RANGE



PRECISION WORK

Select your cut-protection gloves according to your specific needs. For precision work, you need gloves that act like a second skin, protecting against cuts but maintaining excellent dexterity.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

2 RISK

The higher the level of performance, the greater the glove's resistance to the combined effects of the sharpness of the object's cutting edge and the pressure applied.

- low** risk - ISO B
- moderate** risk - ISO C
- high** risk - ISO D
- very high** risk - ISO E

3 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and the nature of the fabric, in a given environment.

- short** service life
- long** service life
- high-performance** service life

dry and relatively clean
ENVIRONMENTS

high
RISK

very high
RISK

long
SERVICE LIFE

high-performance
SERVICE LIFE

KRYTECH 586	KRYTECH 615	KRYTECH 694	KRYTECH 622	KRYTECH 644	KRYTECH 645
High cut protection for precise handling in reasonably clean environments	High cut protection providing maximum comfort. A seamless plated knit glove for very good fit, dexterity and flexibility	High cut protection with second skin effect for optimal comfort and dexterity thanks to its 18 gauge. High vision textile for reinforced safety	Very high cut protection, comfortable thanks to excellent adjustment and good compatibility with touch screens	Comfort, suppleness and high dexterity without compromising on cut protection, breathability and durability. Suitable for touch screens	
Liner Seamless textile support in HDPE fibres	Liner Seamless knitted textile support in composite and HDPE fibres	Liner Seamless knitted textile support in composite and HDPE fibres	Liner Seamless knitted textile support in composite and HDPE fibres	Liner Seamless knitted textile support in composite and HDPE fibres	
Gauge 13	Gauge 13	Gauge 18	Gauge 13	Gauge 15	
Coating Polyurethane on palm and fingers	Coating Polyurethane coating on the palm and fingers 815: Nitrile crotch reinforcement between thumb and index	Coating Foam nitrile coating on palm and fingers	Coating Polyurethane coating on the palm and fingers	Coating Foam nitrile coating with sandy finish on palm and fingers	
Cuff Knitted wrist	Cuff Knitted wrist	Cuff Knitted wrist	Cuff Knitted wrist	Cuff Knitted wrist	
Size 6 7 8 9 10 11	Size 6 7 8 9 10 11	Size 6 7 8 9 10 11	Size 6 7 8 9 10 11	Size 6 7 8 9 10 11	
Length 24-30 cm	Length 24-30 cm	Length 24-29 cm	Length 24-29 cm	Length 23-28 cm	
Washable x3	Washable x3	Washable x1	Washable x5	Washable x1	
CAT 2 EN 388 4X43D ISO 13997: 18.6N	CAT 2 EN 388 4X43D ISO 13997: 20N	CAT 2 EN 388 4X42D ISO 13997: 18N	CAT 2 EN 388 4X43E ISO 13997: 29.5N	CAT 2 EN 388 4X43D	CAT 2 EN 407: 2020 X1XXXX

x1 x12 x48

MECHANICAL PROTECTION

CUT PROTECTION: KRYTECH RANGE



PRECISION WORK

Select your cut-protection gloves according to your specific needs. For precision work, you need gloves that act like a second skin, protecting against cuts but maintaining excellent dexterity.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

2 RISK

The higher the level of performance, the greater the glove's resistance to the combined effects of the sharpness of the object's cutting edge and the pressure applied.

- low** risk - ISO B
- moderate** risk - ISO C
- high** risk - ISO D
- very high** risk - ISO E

3 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and the nature of the fabric, in a given environment.

- short** service life
- long** service life
- high-performance** service life

oily and very dirty ENVIRONMENTS



low
RISK



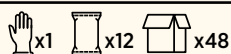
moderate
RISK



high
RISK

high-performance SERVICE LIFE

KRYTECH 580	KRYTECH 599	KRYTECH 600	KRYTECH 585	KRYTECH 582
Light cut protection, grip and skin protected for precise handling in slightly oily and dirty environments	Light protection against cutting, grip and skin protected for complex handling operations in oily environments	Light protection against cutting, grip and skin protected for complex handling operations in very oily environments	Moderate cut protection for enhanced safety, comfort and durability with Grip and Proof Technology	High cut protection for complex handling operations in oily environments
Liner Seamless textile support in HDPE fibres Gauge 13 Coating Double layer coating: Smooth nitrile - Sandy Nitrile Cuff Knitted wrist Size 6 7 8 9 10 11 Length 23-27 cm	Liner Seamless textile support in HDPE fibres Gauge 13 Coating Double layer coating: Smooth nitrile - Sandy Nitrile Cuff Knitted wrist Size 7 8 9 10 11 Length 23-27 cm	Liner Seamless textile support in HDPE fibres Gauge 13 Coating Double layer coating: Smooth nitrile - Sandy Nitrile Cuff Knitted wrist Size 7 8 9 10 Length 23-26 cm	Liner Seamless knitted textile support in composite and HDPE fibres Gauge 15 Coating 3/4 GripandProof nitrile coating Double layer coating: Smooth nitrile - Sandy Nitrile Cuff Knitted wrist Size 7 8 9 10 11 Length 23-27 cm Thickness 1.2 mm Washable x3	Liner Seamless knitted textile support in composite and HDPE fibres Gauge 13 Coating 3/4 nitrile coating Double layer coating: Smooth nitrile - Sandy Nitrile Cuff Knitted wrist Size 6 7 8 9 10 11 Length 23-28 cm Washable x5
CAT 3 EN 388 4342B EN 407: 2020 X1XXXX ISO 18889 GR ISO 13997: 6N	CAT 3 EN 388 4342B EN 407: 2020 X1XXXX ISO 18889 GR ISO 13997: 6N	CAT 3 EN 388 4342B EN 407: 2020 X1XXXX ISO 18889 GR ISO 13997: 6N	CAT 2 EN 388 4X42C ISO 13997: 13N	CAT 2 EN 388 4X43D ISO 13997: 18N



MECHANICAL PROTECTION

CUT PROTECTION: KRYTECH RANGE



PRECISION WORK

Cut-protection with improved comfort, dexterity and safety.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the cuff most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

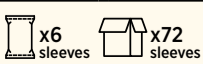
2 RISK

The higher the level of performance, the greater the ability of the cuff to stand up to the combined effects of the sharpness of the cutting edge and the pressure applied.

- low** risk - ISO B
- moderate** risk - ISO C
- high** risk - ISO D
- very high** risk - ISO E

for all environments

low RISK	moderate RISK	high RISK	high RISK
KRYTECH 532 	KRYTECH 602 	KRYTECH 603 	KRYTECH 538 
<p>Adjustable seamless knitted sleeves that provide light cut protection, optimal comfort and freedom of movement to the wearer</p>	<p>Ultra-comfortable sleeves designed with an advanced seamless knit for a perfect fit, fresh feel and excellent flexibility providing moderate cut protection</p>	<p>Adjustable and ultra-comfortable sleeves designed with an advanced seamless knit for a perfect fit, fresh feel and excellent flexibility providing moderate cut protection</p>	<p>Adjustable seamless knitted sleeves that provide high cut protection, optimal comfort and freedom of movement to the wearer</p>
<p>Liner Seamless knitted textile support in HDPE fibres Specific features Self-gripping tape closure system Thumbslot Gauge 13 Length 45 cm Width 140 mm Size Unique Washable x5</p>	<p>Liner Seamless knitted textile support in HDPE fibres Cuff Knitted wrist Gauge 15 Length 45 cm Width 120 mm Size Unique Washable x3</p>	<p>Liner Seamless knitted textile support in HDPE fibres Specific features Self-gripping tape closure system High visibility thumbslot Gauge 15 Length 53 cm Width 120 mm Size Unique Washable x3</p>	<p>Liner Seamless knitted textile support in HDPE and composite fibres Specific features Self-gripping tape closure system Thumbslot Gauge 13 Length 60 cm Width 150 mm Size Unique Washable x5</p>
 CAT 2 EN 388  334XB ISO 13997: 5.3N	 CAT 2 EN 388  3X42C ISO 13997: 11.6N	 CAT 2 EN 388  3X42C ISO 13997: 11.6N	 CAT 2 EN 388  4X4XD ISO 13997: 17.8N



MECHANICAL PROTECTION

CUT PROTECTION: KRYTECH RANGE



HEAVY-DUTY WORK

Select your cut-protection gloves according to your specific needs. For heavy-duty work, your gloves must protect against cuts and impacts but also need to be tough and long lasting.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the glove most suitable for your working environment:

- dry** and **relatively clean** environments
- oily** and **very dirty** environments
- wet** environments

2 RISK

The higher the level of performance, the greater the glove's resistance to the combined effects of the sharpness of the object's cutting edge and the pressure applied.

- low** risk - ISO B
- moderate** risk - ISO C
- high** risk - ISO D
- very high** risk - ISO E

3 SERVICE LIFE

The service life of a glove for precision work is directly linked to the thickness of the polymer layer covering the fabric and the nature of the fabric, in a given environment.

- short** service life
- long** service life
- high-performance** service life

dry and relatively clean ENVIRONMENTS		wet ENVIRONMENTS		oily and very dirty ENVIRONMENTS			
high RISK	very high RISK	high RISK	low RISK	high RISK	high RISK	very high RISK	very high RISK
high-performance SERVICE LIFE	short SERVICE LIFE	high-performance SERVICE LIFE					
KRYTECH 836 High cut protection and resistance to wear with optimal dexterity and comfort Liner Seamless knitted textile support in composite and HDPE fibres Gauge 13 Coating Leather covering on palm with thumb/index finger reinforcements Cuff Knitted wrist Size 7 8 9 10 11 Length 27-32 cm Washable x5	KRYTECH 838 High cut protection for the food industry. Ambidextrous Liner Seamless textile support in HDPE fibres Gauge 10 Cuff Knitted wrist Size 6 7 8 9 10 11 Length 34 cm Washable x20 *See food compatibility chart, p. 56	KRYTECH 832 High cut protection for handling heavy, sharp objects in dry and relatively clean environments Liner Seamless knitted textile support in composite and HDPE fibres Gauge 10 Coating Leather covering on palm with thumb/index finger reinforcements Cuff Knitted wrist Size 8 9 10 11 Length 24-27 cm Washable x5	KRYTECH 840 High cut protection for handling heavy or sharp objects in wet environments Liner Seamless knitted textile support in composite and HDPE fibres Gauge 10 Coating Latex palm and fingers/ Non-slip embossed Cuff Knitted wrist Size 7 8 9 10 Length 23-26 cm	KRYTECH 380 Light protection against cutting, grip and skin protected for heavy handling operations in oily/dirty environments Liner Seamless textile support in HDPE and cotton fibres Gauge 13 Coating Double layer coating: Smooth nitrile - Sandy Nitrile Safety cuff Size 8 9 10 Length 21-22 cm Thickness 2 mm	KRYTECH 395 Lasting chemical protection and high cut protection combined Liner Cotton textile support Coating Nitrile between internal and external finish Size 8 9 10 Length 32 cm Thickness 2.15 mm	KRYTECH 851 High cut protection, shock absorption, durability and comfort for heavy handling work Liner Seamless knitted textile support in composite and HDPE fibres Gauge 13 Coating Double layer coating: Smooth nitrile - Sandy Nitrile Safety cuff Size 7 8 9 10 11 Length 25-28 cm	KRYTECH 837 High cut protection designed to ensure comfort, dexterity and durability for heavy handling work Liner Seamless knitted textile support in HDPE and composite fibres Gauge 13 Coating Foam nitrile coating with leather reinforcement at palm except thumb/index fingertips / Nitrile croch reinforcement Cuff Knitted wrist Size 8 9 10 11 Length 30 cm Washable x5
CAT 2	CAT 2	CAT 2	CAT 2	CAT 2	CAT 3	CAT 2	CAT 2
EN 388 4X43D EN 407: 2020 X1XXXX ISO 13997: 17.2N	EN 388 2X4XE ISO 13997: 24.2N	EN 388 4X43E EN 407: 2020 X1XXXX ISO 13997: 24.3N	EN 388 3X43D EN 407: 2020 X2XXXX ISO 13997: 19.8N	EN 388 4344B EN 407: 2020 X1XXXX ISO 13997: 7.6N	EN 388 4X43D EN 407: 2020 X1XXXX EN ISO 374-1 TYPE B JKOPT EN ISO 374-5 X1XXXX ISO 13997: 20.4N	EN 388 4X43DP ISO 13997: 17.6N	EN 388 4X44E EN 407: 2020 X1XXXX ISO 13997: 29.9N

THERMAL PROTECTION

The Mapa Professional thermal protective glove range provides excellent comfort and protection to hands whenever work situations require thermal protection in a hot or cold environment.



HOW CAN YOU REFINE YOUR CHOICE?

1 TEMPERATURE

Depending on the temperature of the objects to be handled.

- Temperature - 10°C
- Temperature up to 150°C
- Temperature above 150°C

2 ENVIRONMENT

Depending on the environment in which you are working.

- wet environments
- dry environments
- moderately oily environments
- chemical environments

3 USAGE DURATION

In cold settings, the duration depends on the intrinsic quality of the coating material. In hot settings, the duration depends on the contact time with the part at a given temperature.

SERVICE LIFE (COLD)

- long service life
- high-performance service life

CONTACT TIME (HOT)

- short contact
- prolonged contact

TEMPERATURE -10°C		TEMPERATURE up to 150°C		TEMPERATURE above 150°C	
wet ENVIRONMENTS dry ENVIRONMENTS moderately oily ENVIRONMENTS		dry ENVIRONMENTS moderately oily ENVIRONMENTS		wet ENVIRONMENTS chemical ENVIRONMENTS moderately oily ENVIRONMENTS	
long SERVICE LIFE high-performance SERVICE LIFE		CONTACT TIME short-term 80°C 70s 100°C 30s 125°C 20s		CONTACT TIME prolonged 80°C 1min50s 100°C 1min 125°C 38s	
CONTACT TIME prolonged 80°C 1min50s 100°C 1min 125°C 38s		CONTACT TIME short-term 100°C 37s 150°C 16s 175°C 12s			
TEMPICE 780 Thermal insulation 100% sealed for protecting against intense contact cold		TEMPICE 700 Dexterity and comfort for optimised thermal protection and durability		TEMPDEX 710 High dexterity and thermal protection	
TEMPDEX 720 Dexterity and resistance to cuts for optimised thermal protection		TEMPCOOK 476 Hygienic with high-temperature thermal protection 100% liquid-proof		TEMPTEC 332 Effective thermal insulation and multi-purpose chemical resistance	
Internal finish Jersey textile support lined with a woollen sleeve External finish Pebbled PVC coating Size 9 10 Length 30 cm		Internal finish Double seamless knitted textile support Gauge 10 for internal seamless Gauge 15 for external seamless External finish 3/4 smooth nitrile coating with sandy nitrile on the palm and fingers Cuff Knitted wrist Size 7 8 9 10 Length 24-27 cm Washable x5		Internal finish Seamless knitted textile support Gauge 13 External finish Nitrile coating and dot embossing on palm and finger Cuff Knitted wrist Size 7 9 11 Length 23-27 cm	
Internal finish Knitted seamless textile support made from aramid fibres Gauge 10 External finish Nitrile coating and dot embossing on palm and finger Cuff Knitted wrist Size 7 9 11 Length 24-28 cm		Internal finish Knitted thermal protection External finish Non-slip embossed Nitrile coating Size 7(S) 9(M) 10(L) Length 45 cm *See food compatibility chart, p. 56		Internal finish Knitted thermal protection External finish Pebbled Polychloroprene (neoprene) coating Size 8 9 10 Length 36 cm	
CAT 3 EN 388 3221X EN 511 121 EN ISO 374-1 TYPE B KPT EN ISO 374-5		CAT 2 EN 388 4111X EN 407: 2020 X1XXXX EN 388 3222X EN 511 02X		CAT 2 EN 388 4343B EN 407: 2020 X2XXXX EN ISO 13997: 7N	
CAT 3 EN 388 4443D EN 511 111 EN 407: 2020 X2XXXX EN ISO 374-1 TYPE A AFGJOT EN ISO 374-5		CAT 3 EN 388 2212X EN 511 111 EN ISO 374-1 TYPE A ACLMNS EN 407: 2020 X2XXXX			
x1 x48		x1 x12 x72		x1 x10 x50	
x1 x12 x72		x1 x12 x72		x1 x6	

FOOD EXPERT RANGE

Compliance with hygiene rules is an essential requirement in the food industry. The industry invests to continuously improve the safety of its customers, as producers alone are legally liable for the sanitary quality of their products.

European Regulations define in great detail the food contact tests to be performed for each type of food. Therefore, a glove may be approved for the handling of certain foodstuffs but not others.

Indeed, simply affixing the pictogram to a glove without giving more detailed information does not provide an adequate guarantee of compatibility with a given food.

Through its dedicated food industry selection guide, Mapa Professional aims to help end users check the food compliance of each glove according to the foods they actually handle, strictly in line with **European Regulations**.

By providing the test results for all of the gloves in its Food Expert range, Mapa Professional aims to meet the strictest requirements of its customers' Quality systems.

These tests are available on our Mapa Professional website

mapa-pro.com



SELECT THE RIGHT GLOVE FOR YOU DEPENDING ON THE FOOD HANDLED

- STEP 1** Find the food you handle using the food groups.
- STEP 2** Identify the gloves suitable for handling this type of food.

THEN CHECK YOUR GLOVE FOR USE AND COMFORT

- STEP 3** Turn to the next page to choose the level of protection required (disposable, thermal protection, cut protection, liquid-proof) and the performance required based on your use.

FOOD CONTACT: YOUR SELECTION GUIDE

SELECT THE RIGHT GLOVE

- Suitable for contact with this type of food
- If pH > 4.5, suitable for contact with this type of food. If pH < 4.5, unsuitable
- Unsuitable for contact with this type of food

STEP 1	YOU ARE HANDLING	Page 58						Page 60				Page 62								
		DISPOSABLE GLOVES						Thermal Protection	Handling protection		Cut Protection	LIQUID-PROOF GLOVES								
		PVC	Vinyl / Nitrile	Natural latex	Nitrile						Natural latex			Nitrile						
		SOLO 990	SOLO BLACK 935	SOLO 988	SOLO PLUS 995	SOLO 967	SOLO 997	SOLO 999	TEMPCOOK 476	ULTRANE 541	ULTRANE 510	KRYTECH 838	VITAL 175	VITAL 177	VITAL 165	JERSETTE 308	ULTRANITRIL 472	ULTRANITRIL 480	ULTRANITRIL 475	ULTRANITRIL 495
DRINKS	Non-alcoholic beverages or alcoholic beverages of an alcoholic strength lower than or equal to 6% vol. clear																			
	Non-alcoholic beverages or alcoholic beverages of an alcoholic strength lower than or equal to 6% vol. cloudy																			
	Alcoholic beverages of an alcoholic strength of between 6% vol. and 20%																			
	Alcoholic beverages of an alcoholic strength above 20%																			
CEREALS, STARCH, SUGAR, CHOCOLATE AND BY-PRODUCTS	Starches, cereals, flour, meal, dry pasta e.g. macaroni, spaghetti and similar products and fresh pasta																			
	Biscuits, pastry, cakes and other bakery products, dry, sugar and confectionery products in solid form; without fatty substances																			
	Biscuits, pastry, cakes and other bakery products and confectionery products in solid form; with fatty substances, chocolate, substitutes and products coated																			
	Confectionery products in moist past form																			
FRUITS, VEGETABLES AND BY-PRODUCTS	Molasses, sugar syrups, honey																			
	Confectionery products with fatty substances on the surface																			
	Whole fruit, fresh or chilled, unpeeled; dried or dehydrated fruits; nuts shelled and roasted																			
	Fresh vegetables, peeled or cut																			
	Processed: cut, in the form of purées, paste or preserved in an aqueous medium, including pickled and in brine																			
FAT AND OILS	Processed in an alcoholic medium																			
	Preserved vegetables in an oily medium																			
ANIMAL PRODUCTS AND EGGS	Preserved fruits in an oily medium																			
	Nuts in paste or cream form																			
	Animal or vegetable, natural or treated																			
	Water emulsions in oil (margarine, butter)																			
	Crustaceans and molluscs not naturally protected by their shells, preserved fish in an aqueous medium																			
	Crustaceans and molluscs not naturally protected by their shells, preserved fish in an oily medium, marinated meat products in an oily medium																			
	Crustaceans and molluscs fresh within the shell																			
	Fresh fish, chilled, salted, smoked or in the form of paste																			
DAIRY PRODUCTS	Meat of all zoological species, fresh, chilled, salted, smoked or in the form of paste, creams																			
	Preserved and part-preserved meat in an aqueous medium																			
	Preserved and part-preserved meat in an oily medium																			
	Eggs, egg yolks, whites of eggs in a powdered or dried or frozen form																			
	Eggs, egg yolks, whites of eggs in a liquid or cooked form																			
	Eggs, egg yolks, whites of eggs in a liquid or cooked form																			
	Fermented milk (yoghurt, butter milk), cream and sour cream																			
	Natural cheese without rind or with edible rind and melting cheese																			
DRESSING	Whole cheeses with non-edible form																			
	Processed cheese (soft cheese), preserved cheese in an aqueous medium (mozzarella...)																			
	Preserved cheese in an oily medium																			
	Milk powder including infant formula																			
MIXED FOOD PREPARATIONS	Sauces with aqueous character																			
	Sauces with fatty character (e.g. mayonnaise, salad creams...)																			
	Mustard																			
	Vinegar																			
	Sandwiches, toasted bread, pizza containing any kind of foodstuff with fatty substances on the surface																			
	Sandwiches, toasted bread, pizza containing any kind of foodstuff but without fatty substances on the surface																			
OTHERS	Soups, sauces, broths powdered or dried with fatty characters (including yeast)																			
	Soups, sauces, broths powdered or dried but without fatty characters (including yeast)																			
	Soups, sauces, broths in any other form with fatty characters (including yeast)																			
	Soups, sauces, broths in any other form but without fatty characters (including yeast)																			
	Aliments frits ou rôtis d'origine végétale (pommes de terre, beignets)																			
	Aliments frits ou rôtis d'origine animale																			
	Dried foods with fatty substances on the surface																			
	Dried foods without fatty substances on the surface																			
	Herbs, spices, aromatic herbs, coffee and coffee substitutes, granulated or powdered																			
	Spices and seasoning in oily medium																			
Cocoa powder																				
Cocoa paste																				
Concentrated extracts of an alcoholic strength equal to or exceeding 6% vol.																				
Frozen or deep-frozen foods																				
Ice-creams																				

FOOD EXPERT RANGE

Compliance with hygiene rules is an essential requirement in the food industry. The industry invests to continuously improve the safety of its customers, as producers alone are legally liable for the sanitary quality of their products.

European Regulations define in great detail the food contact tests to be performed for each type of food. Therefore, a glove may be approved for the handling of certain foodstuffs but not others.

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By providing the test results for all of the gloves in its Food Expert range, Mapa Professional aims to meet the strictest requirements of its customers' Quality systems.



DISPOSABLE GLOVES

MATERIAL PVC / VINYL		MATERIAL VINYL / NITRILE		MATERIAL NATURAL LATEX		MATERIAL NITRILE	
FINISH POWDER FREE		FINISH POWDERED		FINISH POWDER FREE		FINISH CHLORINATED	
SOLO 990	SOLO BLACK 935	SOLO 988	SOLO PLUS 995	SOLO 967	SOLO 997	SOLO 999	
							
The good value for precise movements in food handling	Good mechanical resistance and fingers sensitivity	The perfect protection for light food handling	The ideal protection for light food handling	Great value for light handling of oily food Supplied in bags or boxes	Good mechanical resistance, fingers sensitivity for handling of oily foods	Good mechanical resistance, fore arm protection, fingers sensitivity for handling of oily foods	
External finish Smooth	External finish Smooth	External finish Smooth	External finish Smooth with pebbled fingertips	External finish Smooth with pebbled fingertips	Internal finish Chlorinated	Internal finish Chlorinated	
Size 6 7 8 9	Size 6 7 8 9	Size 6 7 8 9	Size 6 7 8 9	Size 6 7 8 9	External finish Smooth with pebbled fingertips	External finish Smooth with pebbled fingertips	
Length 24 cm	Length 24 cm	Length 24 cm	Length 24 cm	Length 25 cm	Size 6 7 8 9	Size 6 7 8 9	
Thickness 0.07 mm	Thickness 0.08 mm	Thickness 0.08 mm	Thickness 0.10 mm	Thickness 0.07 mm	Length 24 cm	Length 29-30 cm	
Thickness 0.07 mm					Thickness 0.10 mm	Thickness 0.10 mm	
CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3
EN ISO 374-1 TYPE C 	EN ISO 374-1 TYPE C 	EN ISO 374-1 TYPE C 	EN ISO 374-1 TYPE C 	EN ISO 374-1 TYPE C 	EN ISO 374-1 TYPE B 	EN ISO 374-1 TYPE B 	EN ISO 374-1 TYPE B 
EN ISO 374-5 	EN ISO 374-5 	EN ISO 374-5 	EN ISO 374-5 	EN ISO 374-5 	EN ISO 374-5 	EN ISO 374-5 	EN ISO 374-5
VIRUS	VIRUS	VIRUS	VIRUS	VIRUS	JKT	VIRUS	JKT

 x100 gloves  x1,000 gloves

FOOD EXPERT RANGE

Compliance with hygiene rules is an essential requirement in the food industry. The industry invests to continuously improve the safety of its customers, as producers alone are legally liable for the sanitary quality of their products.

European Regulations define in great detail the food contact tests to be performed for each type of food. Therefore, a glove may be approved for the handling of certain foodstuffs but not others.

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THERMAL PROTECTION	HANDLING PROTECTION		CUT PROTECTION						
<p>MATERIAL NITRILE</p>	<p>MATERIAL WATER-BASED POLYMER</p>	<p>MATERIAL NITRILE</p>	<p>MATERIAL TEXTILE FIBRE</p>						
<p> CONTACT TIME prolonged</p> <table border="1"> <tr> <td>80°C</td> <td>1min50s</td> </tr> <tr> <td>100°C</td> <td>1min</td> </tr> <tr> <td>125°C</td> <td>38s</td> </tr> </table>	80°C	1min50s	100°C	1min	125°C	38s	<p> long SERVICE LIFE</p>	<p> high-performance SERVICE LIFE</p>	<p> short SERVICE LIFE</p>
80°C	1min50s								
100°C	1min								
125°C	38s								
<p>TEMPCOOK 476</p>  <p></p> <p>Hygiene and effective thermal protection - 100% liquid-proof</p>	<p>ULTRANE 510</p>  <p>Optimal comfort, high level of breathability and durability</p>	<p>ULTRANE 541</p> <p></p>  <p>Comfort and dexterity compliant with all type of foods</p>	<p>KRYTECH 838</p>  <p>Reinforced cut protection for the food industry - Ambidextrous</p>						
<p>Internal finish Knitted thermal protection</p> <p>External finish Non-slip embossed</p> <p>Size 7(S) 9(M) 10(L)</p> <p>Length 45 cm</p>	<p>Liner Seamless knitted textile support</p> <p>Gauge 13</p> <p>Coating Polymer coating with aqueous base on palm and fingers</p> <p>Cuff Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 22-27 cm</p> <p>Washable x1</p> <p></p>	<p>Liner Seamless knitted textile support</p> <p>Gauge 15</p> <p>Coating Foam nitrile coating with sandy finish on palm and fingers</p> <p>Cuff Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 22-28 cm</p> <p>Washable x1</p> <p></p>	<p>Internal finish Seamless textile support in HDPE fibres</p> <p>Gauge 10</p> <p>Size 6 7 8 9 10 11</p> <p>Length 34 cm</p> <p>Washable x20</p>						
<p>CAT 3</p> <p>EN 388 4443D EN 511 111 EN 407: 2020 X2XXXX</p> <p>EN ISO 374-1 TYPE A EN ISO 374-5</p> <p>AFGJOT</p> <p> x1  x6</p>	<p>CAT 3</p> <p>EN 388 4131X</p> <p> x1  x12  x96</p>	<p>CAT 2</p> <p>EN 388 4121A EN 407: 2020 X1XXXX</p> <p> x12  x96</p>	<p>CAT 2</p> <p>EN 388 2X4XE ISO 13997: 24.2N</p> <p> x1  x10</p>						





FOOD EXPERT RANGE



HOW CAN YOU REFINE YOUR CHOICE?

1 WEAR TIME

Identifies the comfort level required by the operator. The longer the wear time, the more comfortable the glove needs to be (perspiration, flexibility/fatigue).

-  **short** wear
(Chlorinated interior finish)
-  **intermittent** wear
(Flocked interior finish)
-  **continuous** wear
(Fabric-lined interior finish)
-  **ultra-comfort** wear
(MAPA exclusive technology providing greater flexibility)

2 MATERIAL

Materials guide for disposable and liquid-proof gloves.

Natural latex

Flexibility, comfort and value for money.

Nitrile

Strength, durability, handling of oily foods with no risk of allergies.

LIQUID-PROOF GLOVES							
MATERIAL NATURAL LATEX				MATERIAL NITRILE			
FINISH POWDER FREE	FINISH CHLORINATED	FINISH FLOCKED	FINISH TEXTILE	FINISH EASY DONNING TREATMENT	FINISH CHLORINATED	FINISH FLOCKED	
 short WEAR		 intermittent WEAR	 continuous WEAR	 short WEAR		 intermittent WEAR	
VITAL 175  Flexibility and precision dexterity	VITAL 177  Dexterity and flexibility	VITAL 165  Light glove, supple and flexible	JERSETTE 308  Comfortable and suitable for long-term work	ULTRANITRIL 472  Fingertip precision for handling oily foods	ULTRANITRIL 480  Forearm protection for safe handling of oily foods	ULTRANITRIL 475  Good sensitivity for standard chemical protection	ULTRANITRIL 495  Good mechanical resistance and long-lasting chemical protection
Internal finish Easy donning treatment External finish Non-slip embossed Size 6 7 8 9 10 Length 31 cm Thickness 0.40 mm	Internal finish Chlorinated External finish Non-slip embossed Size 6 7 8 9 10 Length 31 cm Thickness 0.40 mm	Internal finish Flocked External finish Non-slip embossed Size 7 8 9 10 Length 30.5 cm Thickness 0.29 mm	Internal finish Textile support External finish Smooth Size 6 7 8 9 10 Length 30-32 cm Thickness 1.15 mm	Internal finish Chlorinated External finish Pebbled Size 6 7 8 9 10 Length 31 cm Thickness 0.20 mm	Internal finish Chlorinated External finish Non-slip embossed Size 7 8 9 10 11 Length 46 cm Thickness 0.55 mm	Internal finish Flocked External finish Non-slip embossed Size 6 7 8 9 10 Length 31 cm Thickness 0.34 mm	Internal finish Flocked External finish Non-slip embossed Size 6 7 8 9 10 Length 32 cm Thickness 0.41 mm
CAT 3		CAT 1		CAT 3		CAT 3	
EN 388 0010X EN ISO 374-1 TYPE B KPT EN ISO 374-5 VIRUS	EN 421 0010X EN ISO 374-1 TYPE B KPT EN ISO 374-5 EN 421	EN 388 0010X EN ISO 374-1 TYPE B KPT EN ISO 374-5 EN 421	EN 388 2131X EN ISO 374-1 TYPE B KPT EN 407: 2020 X1XXXX	EN 388 2101X EN ISO 374-1 TYPE B JOT EN ISO 374-5 EN 421 VIRUS	EN 388 4102X EN ISO 374-1 TYPE A AJKOPT EN ISO 374-5 ISO 18889 G2	EN 388 3001X EN ISO 374-1 TYPE B JOT EN ISO 374-5	EN 388 3101X EN ISO 374-1 TYPE A AJKOPT EN ISO 374-5
 x1  x10  x100	 x1  x5  x50	 x10  x100	 x1  x12	 x1  x12  x72	 x1  x10  x100		

CRITICAL ENVIRONMENT PROTECTION

To ensure the protection of both operators and the products they handle, the Mapa Professional ranges of gloves were designed to perfectly fulfill the requirements of high-tech production.

Created with innovative, highly technical processes and subject to inspection at every stage of their design and packaging, these gloves satisfy all the quality criteria necessary for work in controlled environments.



QUALITY GUARANTEES AT EVERY STAGE OF PRODUCTION

- Mapa Professional uses its own post-manufacturing cleaning process and clean rooms to maintain a level of product and packaging quality that meets requirements for cleanliness and sterility.
- All manufacturing sites have ISO 9002 certification.
- The levels of glove cleanliness are tested periodically to ensure that the production quality of these gloves intended for use in critical environments complies with established specifications.
- Each chemical protection glove is tested using appropriate methods to detect any sealing defects so as to maintain operator safety.
- The chemical resistance checks comply with ASTM standards and EN 374-3, providing users with the information they need to choose a suitable glove for a given application.

YOUR PRIORITIES ARE OUR PRIORITIES

- improving user effectiveness, productivity and safety by designing gloves that are ever-more effective and safe to use,
- increasing production yields by reducing the amount of contaminants in products.

CONTROLLED ENVIRONMENT (CLEAN ROOM)

ENVIRONMENT

ADVANTECH 529		ADVANTECH 519		ADVANTECH 517		
Reinforced mechanical resistance for short-duration operations		The chemical protection of nitrile combined with excellent mechanical resistance		An exclusive, comfortable tripolymer for optimal mechanical and chemical resistance		
Material Nitrile		Material Nitrile		Material Mixed formulas (latex, polychloroprene (neoprene) and nitrile)		
Internal finish Chlorinated		Internal finish Chlorinated		ADVANTECH 513 Internal finish Chlorinated	ADVANTECH 514 Internal finish Chlorinated	ADVANTECH 517 Internal finish Chlorinated
External finish Smooth with pebbled fingertips		External finish Chlorinated		External finish Pebbled fingertips	External finish Non-slip embossed	External finish Non-slip embossed
Size 6 7 8 9 10		Size 7 8 9 10		Size 9	Size 7 8 9 10	Size 6 7 8 9 10
Length 30 cm		Length 33 cm		Length 30.5 cm	Length 38 cm	Length 36 cm
Thickness 0.10 mm		Thickness 0.30 mm		Thickness 0.20 mm	Thickness 0.50 mm	Thickness 0.50 mm
CAT 3		CAT 3		CAT 3		
EN ISO 374-1 TYPE B EN ISO 374-5 JKT EN 421		EN 388 EN ISO 374-1 TYPE B 2001X JOT EN ISO 374-5		EN ISO 374-1 TYPE B EN ISO 374-5 KPT EN 421		
				EN 388 1110X EN ISO 374-1 TYPE B KST EN ISO 374-5		



x100 x1,000

x1 x12 x72

x50 x200

x1 x12 x72

x1 x6 x48

Packaging information

References	Pair/Bag	Pairs/ Masterbag	Pairs/ Carton	Page N°
115	1	10	100	17
117	1	10	100	17
124	1	10	100	17
165	1	10	100	17, 63
175	1	10	100	17, 63
177	1	10	100	17, 63
180	1	10	100	17
181	1	10	100	17
185	1	10	100	17
186	1	10	100	17
210	1	10	100	17
258	1	10	100	19
260	1	10	50	21
285	1	-	30	21
298	1	5	50	21
299	1	5	50	21
300	1	5	50	19
301	1	5	50	19
307	1	5	50	19
308	1	5	50	19, 63
319	1	5	50	41
321	1	5	50	21
325	1	5	50	21
328	1	12	96	41
330	1	5	50	41
332	1	-	6	55
339	1	-	6	27
340	1	5	50	27
341	1	5	50	27
344	1	-	1	29
351	-	12	72	17
369	-	5	50	17
375	1	5	50	39
377	1	5	50	25
380	1	6	48	53
381	-	12	72	25

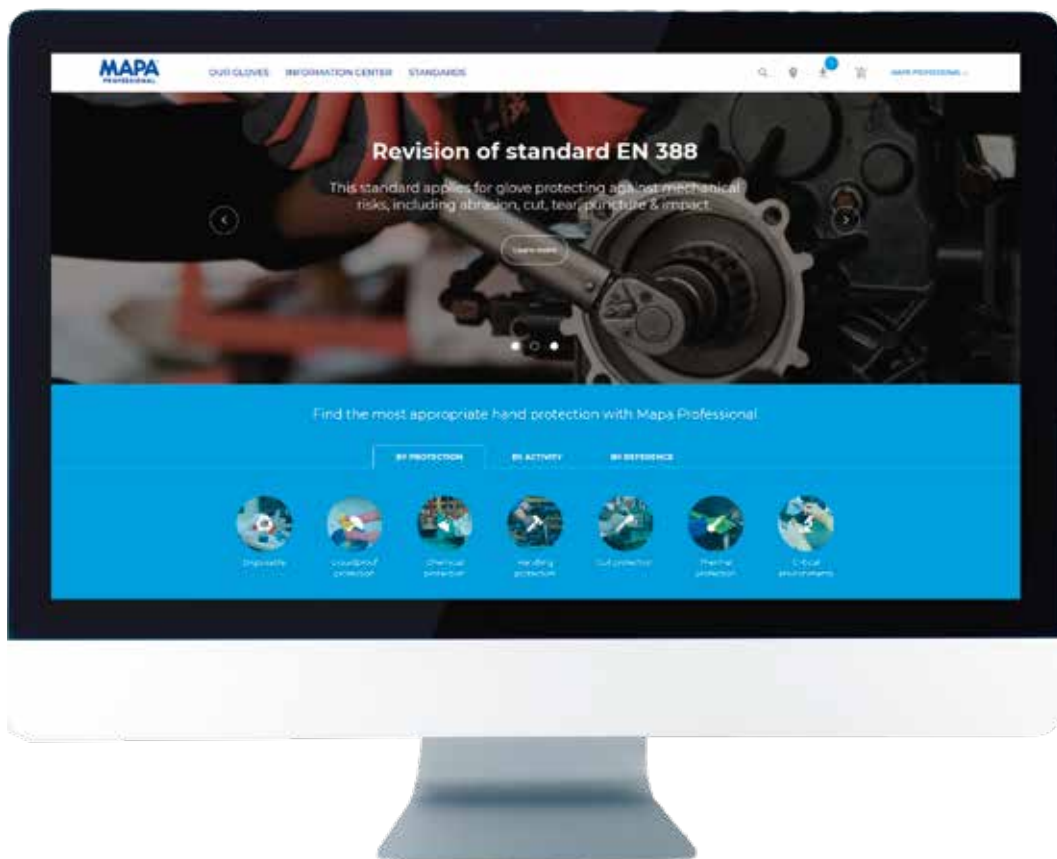
References	Pair/Bag	Pairs/ Masterbag	Pairs/ Carton	Page N°
532 VM	1 sleeve	-	72 sleeves	51
538	-	6	48	51
538 VM	1 sleeve	-	48 sleeves	51
540	1	-	100	17
541	-	12	96	37, 61
544	1	12	96	37
548	1	12	96	35
548 VM	1	12	96	35
549	1	12	96	35
549 VM	1	12	96	35
550	-	10	100	35
550 VM	1	10	100	35
551	1	10	100	35
552	1	-	48	37
553	1	10	100	37
553 VM	1	10	100	37
557	1	10	50	43
558	1	12	96	43
563	1	12	96	45
578	1	12	48	43
579	1	12	96	43
579 VM	1	6	96	43
580	1	12	48	49
582	1	12	48	49
582 VM	1	6	48	49
584	1	12	96	43
585	1	12	48	49
586	1	12	48	47
588	1	12	48	45
599	1	12	48	49
600	1	12	48	49
602	1	6	72	51
603	1	6	72	51
609	1	12	48	43
610	1	12	48	45
615	1	12	48	47

382	-	12	72	27
383	-	10	100	39
388	-	10	100	39
395	1	-	12	53
397	1	10	100	39
401	1	10	100	27
405	1	10	100	19
407	1	6	48	27
410	-	12	48	23
414	1	6	12	27
415	1	10	100	19
420	1	10	100	27
450	1	10	100	27
454	1	-	50	23
468	1	-	1	29
472	-	10	100	23, 63
475	1	12	72	23, 63
476	1	-	6	55, 61
480	1	-	12	25, 63
485	-	12	72	23
491	-	10	100	23
492	1	10	100	23
493	1	10	50	25
495	1	10	100	23, 63
500	1	12	96	37
500 VM	1	12	96	37
510	1	12	96	35, 61
513	-	50	200	65
514	1	12	72	65
517	1	12	72	65
519	1	12	72	65
520	1	10	100	17
522	1	6	48	65
524	1	12	96	35
525	1	12	96	37
525 VM	1	6	96	37
526	1	12	96	37
527	1	12	96	37
529	-	100	1,000	65
532	-	6	72	51

622	1	12	48	47
641	1	12	96	37
642	1	12	48	45
643	1	12	48	45
644	1	12	48	47
645	1	12	48	47
648	1	12	96	35
650	1	-	25	29
651	1	-	25	29
681	1	12	48	35
692	1	12	48	45
693	1	12	48	45
694	1	12	48	47
700	1	12	72	55
710	1	10	50	55
720	1	12	72	55
780	1	-	48	55
809	1	12	48	43
810	1	12	48	45
815	1	12	48	47
832	1	12	72	53
833	-	10	100	39
836	1	12	48	53
837	-	12	48	53
838	1	-	10	53, 61
840	1	12	72	53
850	1	12	48	41
851	1	12	48	53
935	-	100 gloves	1,000 gloves	31, 59
967	-	100 gloves	1,000 gloves	33, 59
977	-	100 gloves	1,000 gloves	33
987	-	100 gloves	1,000 gloves	33
988	-	100 gloves	1,000 gloves	31, 59
990	-	100 gloves	1,000 gloves	31, 59
994	-	100 gloves	1,000 gloves	33
995 PLUS	-	100 gloves	1,000 gloves	31, 59
997	-	100 gloves	1,000 gloves	33, 59
998	-	100 gloves	1,000 gloves	31
999	-	100 gloves	1,000 gloves	33, 59

For more information

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for each segment to help you choose the right glove

► An advanced search engine

to find a product based on your own criteria, with a database continuously updated

► A tool to help you locate

your nearest Mapa Professional distributor

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