



CATALOG 2021

PROTECTIVE GLOVES

A solution
for every hand
that works

MAPA[®]
PROFESSIONAL

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 centers
(60 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 CATALOG?

Step 1: Identify your protection needs



PAGE 12
Chemical protection



PAGE 26
Mechanical protection



PAGE 42
Thermal protection



PAGE 44
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 361 	TELSOL 351 	VITAL 174 	VITAL 520 	VITAL 115 	VITAL 210 	VITAL 180
Long-lasting 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	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, Assembling a part
Paint spraying
Handling chemical compounds
Manufacturing composites
Handling chemical drums

AERONAUTICS
Work with composite materials (resins)

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

HEALTH
Pharmaceutical preparation
Medical manufacturing
Research
Hospitals and clinics

FOOD AND DRINK INDUSTRY
Food handling and preparations

CONSTRUCTION INDUSTRY
Handling construction materials,
glazing

MARITIME
Cultivation of fishing products

AGRICULTURE
Handling of diluted and
concentrated pesticides
Re-entry tasks

ENERGY
Nuclear, wind turbine,
petrochemical industries

CLEANING
Handling of detergents
Industrial cleaning
Small general maintenance
jobs

EUROPEAN LEGISLATION AND STANDARDS

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 the users.

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

Harmonized 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 for the risks for which the product is intended to protect. 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 at this same date.

Regulation (EU) 2016/425 & 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 the manufacturers or importers and conformity procedures to affix the CE marking on PPE.

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

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 & 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 & 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 Coup-test cut resistance</p> <p>From 0 to 4 Abrasion resistance</p> <p>ASTM F2992-15 ISO 13997</p> <p>Weight (grams) needed to cut through material with 20 mm of blade travel</p> <p>A1 ≥ 200 A2 ≥ 500 A3 ≥ 1000 A4 ≥ 1500 A5 ≥ 2200 A6 ≥ 3000 A7 ≥ 4000 A8 ≥ 5000 A9 ≥ 6000</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 EN374-4 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>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 & 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 & 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	 <p>GR gloves ISO 18889</p> <p>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</p>
<p>G1 gloves</p>  <p>G1 ISO 18889</p> <p>Handling diluted pesticides No mechanical risk</p>	<p>G2 gloves</p>  <p>G2 ISO 18889</p> <p>Handling diluted or concentrated pesticides Minimum mechanical resistance requirement</p>	
Disposable gloves	Chemical gloves	

STATIC ELECTRICITY

Which standard deals with electrostatic properties?

GLOVES STANDARDS REQUIREMENT	TEST METHOD	PICTOGRAM
<p>ATEX environment</p> <p>EN 16350 Vertical resistance: <math><10^8 \Omega</math> at 25% relative humidity</p> <p><i>*The tests must be performed on 5 samples which must all pass the limit of vertical resistance</i></p>	EN 1149-2	<p>Introduced in EN ISO 21420: 2020</p> <p>NEW EN 16350</p> 
<p>Protection of Electronic devices from ElectroStatic Discharge (ESD)</p>	No standard	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 article for private use (oven gloves, potholders, etc.) in the new PPE regulation (EU) 2016/425.

The performance levels remain unchanged!



Protective gloves and other hand protective equipments against thermal risks

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

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 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	NEW GLOVE SIZING	NEW GLOVE MARKING	NEW INSTRUCTIONS OF USE
<p>✔ Limited content of DMFa (Dimethylformamide) in polyurethane (PU) gloves. It shall not exceed 1 000 mg/kg</p> <p>✔ Limited content of Polycyclic Aromatic Hydrocarbons (PAHs) in the rubber or plastic materials. It shall not exceed 1 mg/kg</p>	<p>✔ For ATEX area new pictogram</p> <p>EN 16350</p>  <p>The electrostatic properties shall be tested according to the EN 16350 standard (test method EN1149-2)</p>	<p>✔ No more minimum length required</p> <p>Sizes of gloves are defined with respect to the sizes of the hands they are to fit!</p>	<p>For a better manufacturing batch traceability, gloves shall be marked with:</p> <p>✔ Manufacturing date at least the month and year</p> <p>✔ If applicable, obsolescence date behind the  pictogram</p>	<p>Donning, doffing & glove adjustment instructions</p> <p>Comfort & hygiene</p> <p>Protection from contamination</p> <p>Natural rubber content warning</p> <p>No more mandatory* on instructions of use: list of substances that can cause allergies (other than rubber) <i>*on request</i></p>

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

Fits to the hand well and protects the wrist

Straight cuff

Better ventilation of the hand

Rolled cuff

Increased resistance to tearing when putting gloves on

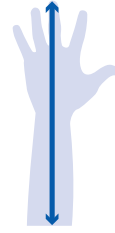
Scalloped cut

Increased service life of the glove

Shapes, sizes
and thicknesses

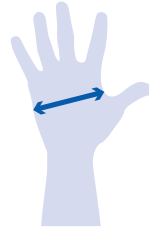
Glove length

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

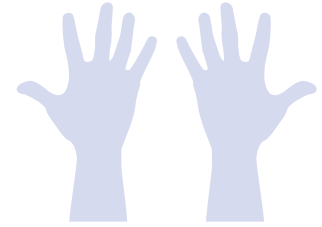
This influences the user's dexterity and the performance of the glove. Varies between 0.1 and 2.5 mm.



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.



A number of external finishes
according to your needs



Smooth

Does not mark the handled objects



Non-slip embossing

Excellent grip in oily environments



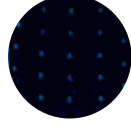
Pebbled

Good grip and minimal glove fouling



Reinforced grip

Excellent grip in wet environment



Dot embossing

Improved thermal insulation

The different types
of internal finish

Powdered

Makes it easier to put gloves on and take them off, without having to increase the thickness of the glove.

Chlorinated/Easy donning treatment

Makes it easier to put the gloves on and take them off without increasing the thickness and without using powder. Reduces the allergy risk of natural latex gloves.

Flocked

Cotton-based textile fibers, covering the inside of the gloves. Fleeced feel comparable with that of a fine carpet. Good absorption of perspiration.

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 absorption of perspiration.

Polyamide

Optimised dexterity (fine, seamless).

Para-aramid

Cutting and heat resistance.

High density polyethylene

Cut-resistance and optimised dexterity.

MAPA TECHNOLOGIES
(SEE NEXT PAGE)



Excellent grip in oily environments
combined with liquidproof protection



Comfort and allows hand to breathe
without compromising durability



Our GRIP&PROOF coating technology has the following benefits for users handling greasy or oily parts:

SKIN PROTECTION


- Sealed at strategic points
- Protects from often highly irritant oils
- Reduces the risk eczema and dermatitis

GRIP

- Excellent grip when handling oily parts with or without a cutting risk
- Reduction in risk of objects falling
- Reduction in muscle fatigue and risk of RSI (Repetitive Strain Injury)
- Ensures better productivity

RESISTANCE

- Usage prolonged due to a very durable coating
- Cleanliness increased by sealing
- Optimization of expenses



- + Sealed at strategic points
- + Protects from often highly irritant oils
- + Reduces the risk eczema and dermatitis

Through its expertise and reliable usage tests, Mapa Professional has designed a range of gloves including the GRIP&PROOF technology, which combines sealing and grip with or without cutting for oily or greasy environments. This technology can be found in our ULTRANE and KRYTECH ranges.



Our RESICOMFORT coating technology offers the following benefits for precise handling operations in a dry environment:

COMFORT AND BREATHABILITY

- Excellent dexterity at the fingertips
- Feels like a second skin
- Suppleness and Flexibility
- Reduction in perspiration

RESISTANCE

- Prolonged use guaranteed by our exclusive process
- Resistance to rubbing through the highly durable coating
- Optimization of expenses



- + No DMF
- + Oekotex
- + Silicon-free
- + Guaranteed without painting refusal
- + Washable

Thanks to our expertise and reliable usage tests, Mapa Professional has designed a range of gloves with or without cutting protection for dry environments, including the RESICOMFORT technology which combines comfort and breathability without compromising on strength and durability. This technology can be found in our ULTRANE and KRYTECH ranges.

NEW PRODUCTS

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

MECHANICAL PROTECTION

ULTRANE 641



Comfort suppleness and high dexterity without any compromise on breathability and durability








See page 29

ULTRANE 527



Detachable fingers glove to avoid hand risk injuries. MAPA Patented Comfort suppleness and high dexterity without any compromise on breathability and durability.

See page 29

CUT PROTECTION						
<p style="font-weight: bold; color: #8e44ad;">KRYTECH 642</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL B</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A2 CUT</p> <p style="font-size: x-small;">Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">See page 31</p>	<p style="font-weight: bold; color: #8e44ad;">KRYTECH 643</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL C</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A3 CUT</p> <p style="font-size: x-small;">Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">See page 33</p>	<p style="font-weight: bold; color: #8e44ad;">KRYTECH 644</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL D</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A4 CUT</p> <p style="font-size: x-small;">Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">See page 35</p>	<p style="font-weight: bold; color: #8e44ad;">KRYTECH 645</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL E</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A5 CUT</p> <p style="font-size: x-small;">Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">See page 35</p>	<p style="font-weight: bold; color: #8e44ad;">KRYTECH 810</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL C</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A3 CUT</p> <p style="font-size: x-small;">A cut protection with a maximum comfort. A seamless plaited glove for very good fit, dexterity and flexibility.</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">Coming Soon</p>	<p style="font-weight: bold; color: #8e44ad;">KRYTECH 815</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL D</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A4 CUT</p> <p style="font-size: x-small;">High cut protection with a maximum comfort. A seamless plaited glove for very good fit, dexterity and flexibility.</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">Coming Soon</p>	<p style="font-weight: bold; color: #8e44ad;">KRYTECH 578</p> <p style="font-size: small; border: 1px solid #000; padding: 2px;">CUT PROTECTION LEVEL B</p>  <p style="font-weight: bold; color: #8e44ad;">ANSI A2 CUT</p> <p style="font-size: x-small;">Cutting, grip and dexterity for dry and reasonably clean environments</p> <p style="border: 1px solid #000; padding: 2px; width: fit-content; margin: 0 auto;">See page 31</p>

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.us



THE MAPA GUIDE: 2 PERFORMANCE INDICATORS

To characterize 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	EN374	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	●	●	●●		●●●	●●
PEROXYDE (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.

STRENGTHS	Value for money Mechanical strength	Excellent flexibility Good puncture and tearing resistance Adapted to cold environment	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
RESTRICTIONS	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

PVC - NATURAL LATEX 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		
 frequent CONTACT		 splashes		
 short WEAR		 short WEAR	 intermittent WEAR	
PYLOX V-5	PYLOX V-10	PYLOX V-20	CLASSICS L-200	SURE-GRIP LF-128
				
Hand-specific, curved-finger design for low hand fatigue, excellent fit.	Comfort, flexibility and curved-finger design provide excellent fit	Dexterity and flexibility, curved-finger design for low hand fatigue, excellent fit.	Dexterity and flexibility in light aggressive environments	Precision dexterity in non-aggressive environments Flock lining to absorb perspiration
Internal finish Powdered	Internal finish Powdered	Internal finish Powdered	Internal finish Unlined	Internal finish Flocked
External finish Smooth	External finish Smooth	External finish Smooth	External finish Embossed texture	External finish Embossed texture
Size M, L, XL	Size M, L, XL	Size L, XL	Size 7 8 9 10 11	Size 7 8 9 10 11
Length 110.5 in 26.7 cm	Length 10.5 in 26.7 cm	Length 10.5 in 26.7 cm	Length 12 in 31 cm	Length 12 in 31 cm
Thickness 5 mil 0.13 mm	Thickness 10 mil 0.25 mm	Thickness 20 mil 0.50 mm	Thickness 18 mil 0.46 mm	Thickness 20 mil 0.50 mm
EN ISO 374-5:2016 	EN ISO 374-5:2016 	EN ISO 374-5:2016 	EN388:2016  0010X EN ISO 374-5:2016  EN421 	EN388:2016  0010X EN ISO 374-5:2016  EN421 
		 	 	

CHEMICAL PROTECTION

NATURAL LATEX 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 MIX		MATERIAL LATEX		
 frequent CONTACT				
 intermittent WEAR		 continuous WEAR		
PROTECTOR AFR-282  Strong protection against aggressive detergents	TWO-TONE NS-53  Precision dexterity in aggressive environments	TRIDENT 286  Good mechanical performance for long-lasting chemical protection	TRIDENT 287  Good mechanical performance extra long-length for added chemical protection	JERSETTE 301 & 315  Maximum comfort for long-term work in aggressive environments
Internal finish Flocked External finish Non-slip embossing Size 6 7 8 9 10 Length 13 in 33 cm Thickness 26 mil 0.60 mm CAT 3	Internal finish Flocked External finish Non-slip embossing Size 7 8 9 10 Length 13 inches 33 cm Thickness 28 mil 0.70 mm CAT 3	Internal finish Chlorinated External finish Smooth Size 9 10 11 Length 18 in 46 cm Thickness 40 mil 1.0 mm CAT 3	Internal finish Chlorinated External finish Smooth Size 9 10 11 Length 23 in 59 cm Thickness 35 mil 0.88 mm CAT 3	Internal finish Textile support External finish Reinforced grip JERSETTE 301 Size 6 7 8 9 Length 12 in 31 cm Thickness Hvy Wt. 0.75 mm CAT 3 
EN388:2016  1110X EN ISO 374-1:2016 TYPE B  KPS EN ISO 374-5:2016 	EN388:2016  2110X EN ISO 374-1:2016 TYPE B  KMT EN ISO 374-5:2016  EN 421 	EN388:2016  2131X EN ISO 374-1:2016 TYPE A  ABKMPT EN ISO 374-5:2016 	EN388:2016  2131X EN ISO 374-1:2016 TYPE A  ABKMPT EN ISO 374-5:2016 	EN388:2016  2131X EN ISO 374-1:2016 TYPE B  KPT EN407  X1XXXX
 	  	 	 	  

CHEMICAL PROTECTION

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

MATERIAL								
splashes			frequent CONTACT			prolonged CONTACT		
short WEAR		intermittent WEAR		ultra-comfort WEAR		short WEAR	intermittent WEAR	continuous WEAR
STANSOLV A10	STANSOLV A15	STANSOLV A490	ULTRANITRIL 492*	STANSOLV AF15/AF18	ULTRANITRIL 381*	ULTRANITRIL 480*	ULTRANITRIL 493*	STANSOLV A14
								
Fingertip precision for light chemical and food handling	High mechanical strength does not compromise the excellent comfort and dexterity	Precision dexterity in mildly aggressive environments, for those sensitive to natural latex	Good sensitivity for standard chemical protection	Good mechanical resistance and long-lasting chemical protection	Maximum comfort for standard chemical protection	Ultra-long chemical protection	Ultra-long chemical protection	Comfort and reinforced mechanical resistance for long-lasting chemical protection
Internal finish Chlorinated	Internal finish Chlorinated	Internal finish Chlorinated	Internal finish Flocked	Internal finish Flocked	Internal finish Mapa technology Textile support	Internal finish Chlorinated	Internal finish Flocked	Internal finish Textile support
External finish Z-grip	External finish Z-grip	External finish Non-slip embossing	External finish Non-slip embossing	External finish Non-slip embossing	External finish Z-grip	External finish Z-grip	External finish Non-slip embossing	External finish Z-grip
Size 6 7 8 9 10 11	Size 6 7 8 9 10 11	Size 6 7 8 9 10 11	Size 7 8 9 10 11	Size AF15 Sz 7 8 9 10 11 AF18 Sz 6 7 8 9 10 11	Size 7 8 9 10 11	Size 7 8 9 10 11	Size 8 9 10 11	Size 7 8 9 10 11
Length 13 in 33 cm	Length 13 in 33 cm	Length 12.5 in 32 cm	Length 12.5 in 32 cm	Length 12 in 30 cm Length 13 in 33 cm	Length 14 in 35.5 cm	Length 18 in 46 cm	Length 15.5 in 39 cm	Length 14 in 35.5 cm
Thickness 11 mil 0.28 mm	Thickness 15 mil 0.38 mm	Thickness 15 mil 0.38 mm	Thickness 15 mil 0.38 mm	Thickness 15 mil 0.38 mm Thickness 18 mil 0.46 mm	Thickness Med. Wt. 0.95 mm	Thickness 22 mil 0.55 mm	Thickness 22 mil 0.55 mm	Thickness 22 mil 0.55 mm
CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3
EN ISO 374-1:2016 TYPE B EN388:2016 3001X JOT	EN ISO 374-1:2016 TYPE B EN388:2016 2101X JOT	EN ISO 374-1:2016 TYPE B EN388:2016 2000X KPT	EN ISO 374-1:2016 TYPE A EN388:2016 3101X AJKOPT	EN ISO 374-1:2016 TYPE A EN388:2016 3101X AJKOPT	EN ISO 374-1:2016 TYPE A EN388:2016 3111A JKLOPT	EN ISO 374-1:2016 TYPE A EN388:2016 4102X AJKOPT	EN ISO 374-1:2016 TYPE A EN388:2016 4102X AJKOPT	EN ISO 374-1:2016 TYPE A EN388:2016 4102X AJKOPT
EN ISO 374-5: 2016 EN421	EN ISO 374-5: 2016	EN ISO 374-5: 2016	EN ISO 374-5: 2016 ISO 18889 VIRUS	EN ISO 374-5: 2016 ISO 18889 VIRUS	EN ISO 374-5: 2016 ISO 18889 X1XXXX	EN ISO 374-5: 2016 ISO 18889	EN ISO 374-5: 2016 ISO 18889	EN ISO 374-5: 2016 ISO 18889
								

CHEMICAL PROTECTION

ULTRANEO 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

splashes		frequent CONTACT		prolonged CONTACT		
intermittent WEAR	continuous WEAR	intermittent WEAR	continuous WEAR	ultra-comfort WEAR	short WEAR	continuous WEAR
ULTRANEO 401 Tactile sensitivity for light chemical protection	STANZOIL NL34/NL52 Comfort with light chemical protection	ULTRANEO 420 Suppleness and freedom of movement for standard chemical protection	CHEMPLY N360 Ultra-high performance chemical protection	ULTRANEO 382 Maximum comfort for standard chemical protection	CHEMPLY N440/N540 Ultra-high performance chemical protection	CHEMZOIL NL339 Comfort and high chemical protection
Internal finish Flocked	Internal finish Textile support	Internal finish Flocked	Internal finish Chlorinated	Internal finish Mapa technology Textile support	Internal finish Chlorinated	Internal finish Textile support
External finish Non-slip embossing	External finish Sandy rough	External finish Non-slip embossing	External finish Z-grip	External finish Z-grip	External finish Z-grip	External finish Sandy rough
Size 6 7 8 9 10 11	NL34 Size 6 7 8 9	420 Size 6 7 8 9 10 11	Size 9 10 11	Size 7 8 9 10 11	Size 9 10 11	Size 8 9 10 11
Length 12 in 31 cm	NL52 Size 8 9 10 11	450 Size 7 8 9 10 11	N360 Length 14 in	Length 14 in 35.5 cm	N440/N540 Length 14 in 35.5 cm	Length 14 in 35.5 cm
Thickness 20 mil 0.55 mm	NL34 Length 12 in 31 cm	450 Length 16 in 41 cm	N730 Length 18 in	Thickness Med. Wt. 0.90 mm	N440/N740 Thickness 30 mil 0.75 mm	Thickness Hvy. Wt. 1.35 mm
	NL52 Length 14 in	Thickness 30 mil 0.75 mm	Thickness 22 mil 0.75 mm	Vend Pack	N740 Length 18 in 45.5 cm	
	Thickness Med. Wt.				N540 Thickness 40 mil 1.01 mm	
CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3	CAT 3
EN ISO 374-1:2016 TYPE A	EN ISO 374-1:2016 TYPE A	EN ISO 374-1:2016 TYPE A	EN ISO 374-1:2016 TYPE A	EN ISO 374-1:2016 TYPE A	EN ISO 374-1:2016 TYPE A	EN ISO 374-1:2016 TYPE A
EN388:2016 2110X	EN388:2016 2121X	EN388:2016 2121X	EN388:2016 2111X	EN388:2016 2121X	EN388:2016 2111X	EN388:2016 3121X
ALMNST	ALMNST	ALMNST	ABCJLMNS	ALMNST	ABCJLMNS	ABCJLMNS
EN ISO 374-5:2016	EN ISO 374-5:2016	EN ISO 374-5:2016	EN ISO 374-5:2016	EN ISO 374-5:2016	EN ISO 374-5:2016	EN ISO 374-5:2016
	EN407 X1XXXX			EN407 X1XXXX		EN407 X1XXXX



CHEMICAL PROTECTION 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		MATERIAL FLUOROELASTOMER
<p>BUTOFLEX 651</p> <p>Ultimate specific chemical resistance</p>	<p>BUTOFLEX 650</p> <p>Ultimate specific chemical resistance</p>	<p>FLUOTECH 468</p> <p>Tactile sensitivity with wear indicator</p>
<p>External finish Z-grip</p> <p>Size 7 8 9 10</p> <p>Length 14 in 35 cm</p> <p>Thickness 20 mil 0.50 mm</p>	<p>Internal finish Mapa technology Textile support</p> <p>External finish Z-grip</p> <p>Size 7 8 9 10</p> <p>Length 14 in 35 cm</p> <p>Thickness Med. Wt. 1.50 mm</p>	<p>Internal finish Chlorinated</p> <p>External finish Smooth</p> <p>Size 8 9 10</p> <p>Length 12 in 30 cm</p> <p>Thickness 20 mil 0.50 mm</p>
CAT 3		CAT 3
<p>EN388:2016 0010X</p> <p>EN ISO 374-1:2016 TYPE A ABCILMNOS</p> <p>EN ISO 374-5:2016 </p>	<p>EN388:2016 1121X</p> <p>EN ISO 374-1:2016 TYPE A ABCILMNOS</p> <p>EN ISO 374-5:2016 </p>	<p>EN388:2016 3102X</p> <p>EN ISO 374-1:2016 TYPE A ADEFGLJMNO</p> <p>EN ISO 374-5:2016 </p>

CHEMICAL PROTECTION DISPOSABLE: TRILITES & 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, sturdiness 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

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.

CHLORINATED

Easy donning and no powder on hands.

EASY DONNING TREATMENT









Makes it easier to put on and take off gloves, without increasing the thickness and without using powder. Reduces the allergy risk of natural latex gloves.

3 COLOR

The use of different colors is a response to the unique demands of certain sectors and it enables visual checks by the assignment of a specific color 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 977  Ideal protection in chemical industry against splashes	SOLO 997  Ideal protection in chemical industry against splashes	SOLO 999  Excellent mechanical resistance, ideal in oily environments	SOLO 980  The perfect protection for light handling in oily environments	TRILITES 994  Tripolymer formula for protection against chemical splashes and splatters	TRILITES GRIPPY 993/983  Tripolymer formula for protection against chemical splashes and splatters
Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 Length 9.5 in 24 cm Thickness 4 mil 0.10 mm	Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 Length 10 in 24.5 cm Thickness 4 mil 0.10 mm	Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 Length 11.5 29.5 cm Thickness 4 mil 0.10 mm	Internal finish Chlorinated External finish Smooth with pebbled fingertips Size 6 7 8 9 10 11 Length 12 in 30 cm Thickness 8 mil 0.20 mm	Internal finish Chlorinated External finish Pebbled Size 6 7 8 9 Length 10 in 25.5 cm Thickness 6 mil 0.15 mm Available in box or bag version	Internal finish Chlorinated External finish Non-Slip Grip Size 6 7 8 9 Length 10 in 25.5 cm Thickness 6 mil 0.15 mm Length 11.5 in 29 cm
CAT 3		CAT 3		CAT 3	
EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 ISO 18889 JKT VIRUS G1	EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 ISO 18889 JKT VIRUS G1	EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 JKT VIRUS	EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 JKT VIRUS	EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 KPT	EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 KPT
					

MECHANICAL PROTECTION ULTRANE RANGE



The Mapa Professional Handling Protection range meets requirements for comfort and protection of the hands 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 that meets your needs according to 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	
<p>ULTRANE 548</p> <p>VENDING MACHINE</p>  <p>Optimal dexterity and sensitivity for light protection</p>	<p>ULTRANE 524</p> <p>Touch Screen</p>  <p>Protection of electronic device from ElectroStatic Discharge (ESD)</p>	<p>ULTRANE 551</p> <p>VENDING MACHINE</p>  <p>Unbeatable for fingertip precision</p>	<p>ULTRANE 510</p>  <p>Optimal comfort, high level of breathability & durability for precision work</p>
<p>Internal finish Seamless knitted Textile support Gauge 13</p> <p>External finish Polyurethane coating on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Available in Vend Pack</p>	<p>Internal finish Seamless textile with conductive fiber Gauge 18</p> <p>External finish Polyurethane coating on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Washable x1</p>	<p>Internal finish Seamless knitted Textile support Gauge 13</p> <p>External finish Polyurethane coating on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Available in Vend Pack</p>	<p>Internal finish Seamless knitted Textile support Gauge 13</p> <p>External finish Polymer coating with aqueous base on the palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Washable x1</p>
<p>CAT 2</p> <p>EN388:2016</p>  <p>3121X</p>	<p>CAT 2</p> <p>EN388:2016</p>  <p>2X20A</p> <p>EN 16350</p> 	<p>CAT 2</p> <p>EN388:2016</p>  <p>4131X</p>	<p>CAT 3</p> <p>EN388:2016</p>  <p>4131X</p>
			

MECHANICAL PROTECTION ULTRANE & TITAN RANGE



The Mapa Professional Handling Protection range meets requirements for comfort and protection of the hands 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 that meets your needs according to 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 541/641	ULTRANE 500/525/526	ULTRANE 500P	TITAN 850
<p>RESICOMFORT TECHNOLOGY</p>	<p>RESICOMFORT TECHNOLOGY</p>	<p>GRIP & PROOF TECHNOLOGY</p>	<p>GRIP & PROOF TECHNOLOGY</p>	<p>GRIP & PROOF TECHNOLOGY</p>
<p>Detachable fingers glove to avoid hand risk injuries. MAPA Patented Comfort suppleness and high dexterity without any compromise on breathability and durability</p>	<p>Comfort suppleness and high dexterity without any compromise on breathability and durability</p>	<p>Assured grip, skin protected and excellent dexterity in lightly oily/dirty environments</p>	<p>Padded Palm provides added protection against minor bumps and scrapes</p>	<p>Shock absorption, durability and comfort for heavy handling work</p>
<p>Internal finish Seamless textile with specific knitting technology patented by MAPA PROFESSIONAL Gauge 15</p> <p>External finish Foam nitrile coating with sandy finish on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Washable x1</p>	<p>Internal finish Seamless knitted textile support in composite and HDPE fibers Gauge 15</p> <p>External finish Foam nitrile coating with sandy finish on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Washable x1</p>	<p>Internal finish Seamless knitted Textile support Gauge 13 - Available in Vend Pack</p> <p>External finish Double layer coating: Nitrile Smooth - Sandy Nitrile Ultrane 500 palm and fingers Ultrane 525 3/4 coating Ultrane 526 complete coating</p> <p>Size Ultrane 500 6 7 8 9 10 11 Ultrane 525/526 7 8 9 10 11</p> <p>Length 9-11 in 23-28 cm</p> <p>Washable x3</p>	<p>Internal finish Seamless knitted textile support Gauge 13</p> <p>External finish Double layer coating: Nitrile Smooth - Sandy Nitrile palm and fingers</p> <p>Size 6 7 8 9 10</p> <p>Length 9-11 in 23-28 cm</p> <p>Washable x3</p>	<p>Internal finish Seamless knitted textile support Gauge 13</p> <p>External finish Nitrile coating on the palm and fingers Double layer coating: Nitrile Smooth - Sandy Nitrile</p> <p>Size 7 8 9 10 11</p> <p>Length 9.25-10.75 in 23.5-27.5 cm</p>
<p>OEKO-TEX® STANDARD 100 CQ 9792/1P1H</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/1P1H</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/1P1H</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/1P1H</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/1P1H</p>
<p>CAT 2</p> <p>EN388:2016 31X1A EN407 X1XXXX</p>	<p>CAT 2</p> <p>EN388:2016 4121A EN407 X1XXXX</p>	<p>CAT 3</p> <p>EN388:2016 4121A ISO 18889 GR</p>	<p>CAT 3</p> <p>EN388:2016 4121A ISO 18889 GR</p>	<p>CAT 2</p> <p>EN388:2016 4132XP</p>

MECHANICAL 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 motor-operated sharp object). 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 that meets your needs according to 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 ENVIRONMENT					
low RISK					
short SERVICE LIFE		long SERVICE LIFE		high-performance SERVICE LIFE	
KRYTECH 578 Moderate protection for very precise handling in reasonably clean environments	KRYTECH 579 Moderate protection for very precise handling in reasonably clean environments	KRYTECH 584 Moderate protection for very precise handling in reasonably clean environments	KRYTECH 557 Moderate protection with crotch reinforcement for precise handling in reasonably clean environments	KRYTECH 511 Cut protection with optimal comfort, breathability and durability	KRYTECH 642 Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens
Internal finish Seamless knitted support manufactured from HDPE fibers Gauge 13 External finish Polyurethane coating on palm and fingers Knitted wrist Size 6 7 8 9 10 11 Length 8.5-10.5 in 22-27 cm Washable x3 	Internal finish Seamless knitted support manufactured from HDPE fibers Gauge 13 - Vend Pack External finish Polyurethane coating on palm and fingers Knitted wrist Size 6 7 8 9 10 11 Length 8.5-10.5 in 22-27 cm Washable x5	Internal finish Seamless knitted support manufactured from HDPE fibers Gauge 13 External finish Polyurethane coating on palm and fingers Knitted wrist Size 6 7 8 9 10 11 Length 10.5-12.5 in 27-32 cm Washable x5	Internal finish Seamless knitted support manufactured from HDPE fibers Gauge 13 - Vend Pack External finish Polyurethane coating on palm and fingers Knitted wrist Size 6 7 8 9 10 11 Length 8.5-10.5 in 22-27 cm Washable x5	Internal finish Seamless knitted support manufactured from HDPE fibers Gauge 13 - Vend Pack External finish Water Based Polymer on palm and fingertips Knitted wrist Size 6 7 8 9 10 11 Length 9-10.5 in 23-27 cm Washable x1	Internal finish Seamless knitted textile support in composite and HDPE fibers Gauge 15 External finish Foam nitrile coating with sandy finish on palm and fingers Knitted wrist Size 6 7 8 9 10 11 Length 8.5-10.5 in 22-27 cm Washable x1
CAT 2 EN388:2016 4X42B ISO 13997: 5.9 N	CAT 2 EN388:2016 4342B ISO 13997: 5.3 N	CAT 2 EN388:2016 4342B ISO 13997: 5.3 N	CAT 2 EN388:2016 4343B ISO 13997: 5.3 N	CAT 2 EN388:2016 4343B ISO 13997: 6.5 N	CAT 2 EN388:2016 4X42B ISO 13997: 5,7 N X1XXXX

MECHANICAL 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 that meets your needs according to 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
ENVIRONMENT

moderate
RISK

ANSI
A3
CUT

short
SERVICE LIFE

long
SERVICE LIFE

high-performance
SERVICE LIFE

KRYTECH
601



An ambidextrous glove with a high dexterity coupled with a good cut performance and comfort

KRYTECH
610



A cut protection with a maximum comfort. A seamless plaited glove for very good fit, dexterity and flexibility

KRYTECH
531

VENDING
MACHINE



KRYTECH 610

Internal finish
Seamless knitted textile support in composite and HDPE fibers
Gauge 13

External finish
Polyurethane coating on the palm and fingers
Knitted wrist

Size
6 7 8 9 10 11

Length
9.5-11.5 in 24-29 cm

Washable x3



CAT 2

ANSI
A3
CUT

EN388:2016
1X4XC

ISO 13997: 14.2 N

ANSI
A3
CUT

EN388:2016
4X43C

ISO 13997: 14.9 N

ANSI
A3
CUT

EN388:2016
4X42C

ISO 13997: 14 N

KRYTECH
643



RESICOMFORT
TECHNOLOGY



Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens

Internal finish
Seamless knitted textile support in composite and HDPE fibers
Gauge 15

External finish
Foam nitrile coating with sandy finish on palm and fingers
Knitted wrist

Size
6 7 8 9 10 11

Length
8.5-10.5 in 22-27 cm

Washable x1



ANSI
A3
CUT

EN388:2016
4X42C

ISO 13997: 13,5N

EN407
X1XXXX



MECHANICAL 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 that meets your needs according to 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
ENVIRONMENT

high
RISK

very high
RISK

long
SERVICE LIFE

high-performance
SERVICE LIFE

<p>KRYTECH 586/576</p>  <p>High-level protection for precise handling in reasonably clean environments</p>	<p>KRYTECH 615</p>  <p>High cut protection with a maximum comfort. A seamless plaited glove for very good fit, dexterity and flexibility</p>	<p>KRYTECH 622</p>  <p>Very high-level cutting protection, comfortable thanks to excellent adjustment and good compatibility with touch screens</p>	<p>KRYTECH 644</p>  <p>Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens</p>	<p>KRYTECH 645</p>  <p>Comfort suppleness and high dexterity without any compromise on cut protection, breathability and durability. Suitable for Touch Screens</p>
<p>Internal finish Seamless knitted support manufactured from HDPE fibers Gauge 13 - Vend Pack</p> <p>External finish Polyurethane on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length Krytech 584 9.5-11.75 in 24-30 cm Krytech 576 - Vend Pack 8.5-10.5 in 22-27 cm</p> <p>Washable x3 CAT 2</p>	<p>Internal finish Seamless knitted textile support in composite and HDPE fibers Gauge 13</p> <p>External finish Polyurethane coating on the palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 9.25-11.75 in 23.5-30 cm</p> <p>Washable x3 CAT 2</p>	<p>Internal finish Seamless knitted textile support in composite and HDPE fibers Gauge 13</p> <p>External finish Polyurethane coating on the palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 9.5-11.5 in 24-29 cm</p> <p>Washable x5 CAT 2</p>	<p>Internal finish Seamless knitted textile support in composite and HDPE fibers Gauge 15</p> <p>External finish Foam nitrile coating with sandy finish on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Washable x1 CAT 2</p>	<p>Internal finish Seamless knitted textile support in composite and HDPE fibers. Gauge 15</p> <p>External finish Foam nitrile coating with sandy finish on palm and fingers Knitted wrist</p> <p>Size 6 7 8 9 10 11</p> <p>Length 8.5-10.5 in 22-27 cm</p> <p>Washable x1 CAT 2</p>
<p>OEKO-TEX® STANDARD 100 CQ 9792/2 JPTH</p> <p>ANSI EN388:2016 A4 CUT 4X42D ISO 13997: 18.6 N</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/2 JPTH</p> <p>ANSI EN388:2016 A4 CUT 4X43D ISO 13997: 20 N</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/2 JPTH</p> <p>ANSI EN388:2016 A5 CUT 4X43E ISO 13997: 29.5 N</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/2 JPTH</p> <p>ANSI EN388:2016 EN407 A4 CUT 4X43D X1XXXX ISO 13997: 16 N</p>	<p>OEKO-TEX® STANDARD 100 CQ 9792/2 JPTH</p> <p>ANSI EN388:2016 EN407 A5 CUT 4X43E X1XXXX ISO 13997: 29.5 N</p>
<p></p>			<p></p>	

MECHANICAL 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 that meets your needs according to 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 582/581
Moderate protection, grip and skin protected for precise handling slightly oily and dirty environments	Moderate protection against cutting, grip and skin protected for complex handling operations in oily environment	Moderate protection against cutting, grip and skin protected for complex handling operations in very oily environment	Enhanced safety, comfort and durability with Grip & Proof Technology	High-level cutting protection for complex handling operations in oily environment
Internal finish Seamless knitted textile support of HDPE fiber Gauge 13 - Vend Pack	Internal finish Seamless knitted textile support of HDPE fiber Gauge 13 - Vend Pack	Internal finish Seamless knitted textile support of HDPE fiber Gauge 13 - Vend Pack	Internal finish Seamless knitted textile support made from composite fibers and HDPE fibers Gauge 15	Internal finish Seamless knitted textile support made from composite fibers and HDPE fibers Gauge 13 - Vend Pack
External finish Double layer coating: Nitrile Smooth - Sandy Nitrile Knitted wrist	External finish Double layer coating: Nitrile Smooth - Sandy Nitrile Knitted wrist	External finish Double layer coating: Nitrile Smooth - Sandy Nitrile Knitted wrist	External finish 3/4 Grip&Proof nitrile coating Double layer coating: Nitrile Smooth - Sandy Nitrile Knitted wrist	External finish Krytech 582 3/4 nitrile coating Krytech 581 palm coating Double layer coating: Nitrile Smooth - Sandy Nitrile Knitted wrist
Size 6 7 8 9 10 11	Size 7 8 9 10 11	Size 7 8 9 10	Size 7 8 9 10 11	Size 7 8 9 10 11
Length 9-11 in 23-28 cm	Length 9-11 in 23-28 cm	Length 9-11 in 23-28 cm	Length 9.5-11.5 in 24-29 cm	Length 9-11 in 23-28 cm
CAT 3	CAT 3	CAT 3	CAT 2	CAT 2
EN388:2016 4342B EN407 X1XXXX ISO 18889 ANSI A2 CUT ISO 13997: 6 N	EN388:2016 4342B EN407 X1XXXX ISO 18889 ANSI A2 CUT ISO 13997: 6 N	EN388:2016 4342B EN407 X1XXXX ISO 18889 ANSI A2 CUT ISO 13997: 6 N	EN388:2016 4X42C ANSI A3 CUT ISO 13997: 13 N	EN388:2016 4X43D ANSI A4 CUT ISO 13997: 18 N

MECHANICAL PROTECTION KRYTECH RANGE



PRECISION WORK

Cut protection cuffs with thumb hole for improved comfort and dexterity and wearer's safety.

HOW CAN YOU REFINE YOUR CHOICE?

1 ENVIRONMENT

Select the cuff that meets your needs according to 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
ENVIRONMENTS

low
RISK

high
RISK

KRYTECH 533

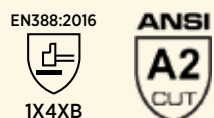
VENDING
MACHINE



ANSI A2 cut resistant Compression Sleeve with thumb hole for added protection & comfort made from HDPE

Length 18 in 45 cm Washable x5

CAT 2



ISO 13997: 5.1 N

KRYTECH 532/539W

VENDING
MACHINE



Moderate protection reinforcement made from HDPE, ultra thin thumb hole in polyamide

Length 18 in 45 cm Washable x5



CAT 2



ISO 13997: 5.3 N

KRYTECH 538/537

VENDING
MACHINE



High-performance protection from HDPE and fiberglass, polyamide ultra-thin thumb loop

Length Krytech 538 24 in 60 cm Vend Pack Washable x5

Krytech 537 18 in 45 cm



CAT 2



ISO 13997: 17.8 N



MECHANICAL PROTECTION

KRYTECH RANGE

HEAVY HANDLING WORK

Select your cut protection gloves according to your specific needs. For heavy handling 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 that meets your needs according to 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 ENVIRONMENT		wet ENVIRONMENTS		oily and very dirty ENVIRONMENTS	
high RISK		very high RISK		high RISK	
high-performance SERVICE LIFE		high-performance SERVICE LIFE		high-performance SERVICE LIFE	
KRYTECH 836 <p>Excellent cutting protection and resistance to wear with optimum dexterity and comfort</p>		KRYTECH 832 <p>High-level protection for handling heavy, sharp objects in dry and relatively clean environments</p>		KRYTECH 840 <p>High-level protection for handling heavy or sharp objects in wet environments</p>	
KRYTECH 395 <p>Lasting chemical protection and cut protection combined</p>		KRYTECH 851 <p>High-level cutting protection, shock absorption, durability and comfort for heavy handling work</p>			
Internal finish Seamless knitted textile support made from HDPE and composite fibers Gauge 13 External finish Leather covering on palm with thumb/forefinger reinforcements Knitted wrist Size 7 8 9 10 11 Length 10.5-12.5 in 27-32 cm Washable x5		Internal finish Seamless knitted textile support made from composite fibers Gauge 10 External finish Leather covering on palm with thumb/forefinger reinforcements Knitted wrist Size 8 9 10 11 Length 9-10.25 in 23-26 cm Washable x5		Internal finish Seamless knitted textile support made from composite fibers Gauge 10 External finish Latex palm and fingers/ Non-slip embossing Knitted wrist Size 7 8 9 10 Length 9-10.25 in 23-26 cm	
Internal finish Multi-layer technology: combination of high strength and nitrile fibers External finish Textile support Size 8 9 10 Length 12.5 in 32 cm		Internal finish Seamless knitted textile support made from HDPE and composite fibers External finish Double layer coating: Nitrile Smooth - Sandy Nitrile Safety cuff Gauge 13 Size 7 8 9 10 11 Length 10-11 in 25-28 cm			
CAT 2 EN388:2016 4X43D EN407 X1XXXX ISO 13997: 17.2 N		CAT 2 EN388:2016 4X43E EN407 X1XXXX ISO 13997: 24.3 N		CAT 3 EN388:2016 3X43D EN407 X2XXXX ISO 13997: 19.8 N	
CAT 3 EN388:2016 4X43D EN407 X1XXXX EN ISO 374-5:2016 ISO 13997: 20.4 N		CAT 2 EN388:2016 4X43DP ISO 13997: 17.6 N			

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

According to the temperature of the objects to be handled.

- Temperature **14°F (-10°C)**
- Temperature **up to 300°F (150°C)**
- Temperature **above 300°F (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

For cold, this relates to the intrinsic quality of the coating material. For heat 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 14°F (-10°C)		TEMPERATURE up to 300°F (150°C)			TEMPERATURE above 300°F (150°C)																									
<ul style="list-style-type: none"> wet ENVIRONMENTS dry ENVIRONMENTS moderately oily ENVIRONMENTS 		<ul style="list-style-type: none"> dry ENVIRONMENTS moderately oily ENVIRONMENTS 			<ul style="list-style-type: none"> wet ENVIRONMENTS chemical ENVIRONMENTS moderately oily ENVIRONMENTS 																									
<ul style="list-style-type: none"> long SERVICE LIFE high-performance SERVICE LIFE 		<p>CONTACT TIME short-term</p> <table border="1"> <tr><td>176°F/80°C</td><td>70s</td></tr> <tr><td>212°F/100°C</td><td>30s</td></tr> <tr><td>257°F/125°C</td><td>20s</td></tr> </table>	176°F/80°C	70s	212°F/100°C	30s	257°F/125°C	20s	<p>CONTACT TIME prolonged</p> <table border="1"> <tr><td>176°F/80°C</td><td>1min50s</td></tr> <tr><td>212°F/100°C</td><td>1min</td></tr> <tr><td>257°F/125°C</td><td>38s</td></tr> </table>	176°F/80°C	1min50s	212°F/100°C	1min	257°F/125°C	38s	<p>CONTACT TIME prolonged</p> <table border="1"> <tr><td>176°F/80°C</td><td>1min50s</td></tr> <tr><td>212°F/100°C</td><td>1min</td></tr> <tr><td>257°F/125°C</td><td>38s</td></tr> </table>	176°F/80°C	1min50s	212°F/100°C	1min	257°F/125°C	38s	<p>CONTACT TIME short-term</p> <table border="1"> <tr><td>212°F/100°C</td><td>37s</td></tr> <tr><td>302°F/150°C</td><td>16s</td></tr> <tr><td>347°F/175°C</td><td>12s</td></tr> </table>		212°F/100°C	37s	302°F/150°C	16s	347°F/175°C	12s
176°F/80°C	70s																													
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212°F/100°C	37s																													
302°F/150°C	16s																													
347°F/175°C	12s																													
<p>TEMPICE 770</p> <p>Thermal insulation 100% sealed for protecting against intense contact cold</p>		<p>TEMPICE 700</p> <p>Dexterity and comfort for optimised thermal protection and durability</p>		<p>TEMPDEX 710</p> <p>High dexterity and thermal protection</p>	<p>TEMPDEX 720</p> <p>Dexterity and resistance to cuts for optimised thermal protection</p>	<p>TEMPDEX 745</p> <p>Dexterity and resistance to cuts for optimised thermal protection</p>	<p>TEMPTEC 332/NL517</p> <p>Effective thermal insulation and multi-purpose chemical resistance</p>																							
<p>Internal finish Jersey textile support lined with a woolen sleeve</p> <p>External finish Pebbled PVC coating</p> <p>Size 9 10 Length 11.75 in 30 cm</p>		<p>Internal finish Double seamless knitted textile support Gauge 10 for internal seamless Gauge 15 for external seamless</p> <p>External finish 3/4 smooth nitrile coating with sandy nitrile on the palm and fingers Knitted wrist</p> <p>Size 7 8 9 10 Length 9.5-10.5 in 24-27 cm</p> <p>Washable x5</p>		<p>Internal finish Seamless knitted textile support Gauge 13 - Vend Pack</p> <p>External finish Nitrile coating and dot embossing on palm and finger Knitted wrist</p> <p>Size 7 9 11 Length 9.5-11 in 24-28 cm</p>	<p>Internal finish Knitted seamless textile support made from aramid fibers. Gauge 10 - Vend Pack</p> <p>External finish Nitrile coating and dot embossing on palm and finger Knitted wrist</p> <p>Size 7 9 11 Length 9.5-11 in 24-28 cm</p>	<p>Internal finish Knitted seamless textile support made from aramid fibers. Gauge 10</p> <p>External finish Nitrile coating and dot embossing on palm and finger Knitted wrist</p> <p>Size 7 9 11 Length 9.5-11 in 24-28 cm</p>	<p>Internal finish Knitted thermal protection</p> <p>External finish Pebbled Neoprene coating</p> <p>Size 8 9 10</p> <p>Length TempTec 332 14 in 35,5 cm TempTec NL517 17 in 43 cm</p>																							
<p>CAT 3</p> <p>EN388:2016 4221X EN511 121 EN ISO 374-1:2016 TYPE B KMO EN ISO 374-5:2016</p>		<p>CAT 2</p> <p>EN388:2016 3222X EN511 02X</p>		<p>CAT 2</p> <p>EN388:2016 4111X EN407 X1XXXX</p>	<p>CAT 2</p> <p>ANSI A2 CUT EN388:2016 4343B EN407 X2XXXX ISO 13997: 7N</p>	<p>CAT 3</p> <p>ANSI A5 CUT EN388:2016 4543E EN407 X2XXXX ISO 13997: 23.4N (2339g)</p>	<p>CAT 3</p> <p>EN388:2016 2212X EN511 111 EN ISO 374-1:2016 TYPE A ACLMNS EN407 X2XXXX</p>																							

CRITICAL ENVIRONMENT PROTECTION

Ensuring 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 of 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 the effectiveness of the users, their productivity and their 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)

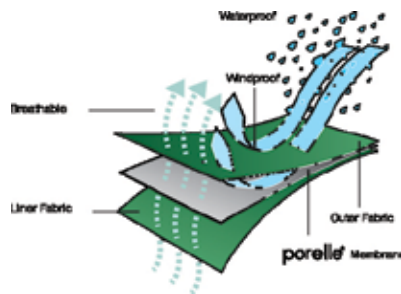
TRILITES 984CP		ADVANTECH 519		ADVANTECH 517 (TRIONIC E194BPK)									
Reinforced mechanical resistance for short duration operations		The chemical protection of nitrile combined with excellent mechanical resistance		TRIONIC O240		ROLLPRUF 0716/0726		ADVANTECH 514		TRIONIC 521		ADVANTECH 522	
Material Tripolymer (latex, Neoprene and nitrile)		Material Nitrile		Material Mixed formulas (latex, Neoprene and nitrile)									
Internal finish Chlorinated		Internal finish Chlorinated		REF 0716/0726		REF 514		REF 517/E194BPK/O240		REF 521/522			
External finish Embossed grip		External finish Z-grip		Internal finish Chlorinated		Internal finish Chlorinated		Internal finish Chlorinated		Internal finish Chlorinated			
Size 6 7 8 9		Size 6 7 8 9 10 11		External finish Pebbled fingertips		External finish Non-slip embossing		External finish Non-slip embossing		External finish Non-slip embossing			
Length 11.5 in 29 cm		Length 13 in 33 cm		Size 7.5 8 8.5 9		Size 6 7 8 9 10 11		Size 6 7 8 9 10		Size 8 9 10			
Thickness 6 mil 0.15 mm		Thickness 11 mil 0.30 mm		Length 12 in 30 cm		Length 15 in 38 cm		Length 14 in 36 cm		Length 18 in 46 cm		Length 24 in 61 cm	
				Thickness 8 mil 0.20 mm		Thickness 20 mil 0.51 mm		Thickness 20 mil 0.50 mm		Thickness 20 mil 0.50 mm			
CAT 3		CAT 3		CAT 3		CAT 3							
EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 KPT		EN388:2016 2001X EN ISO 374-1:2016 TYPE A JOT EN ISO 374-5:2016 		EN ISO 374-1:2016 TYPE B EN ISO 374-5:2016 KPT EN421 		EN388:2016 1110X EN ISO 374-1:2016 TYPE B KST EN ISO 374-5:2016 							



CRYOGENIC PROTECTION

Specialized range of gloves and accessories to protect operators in presence of liquid nitrogen and other cryogenic gases. PPE (Personal Protective Equipment) manufactured with select technical materials following strict quality rules and subject to rigorous tests of strength and durability.

The main function of the breathable Porelle® membrane is to ensure waterproofness in use, while keeping the user dry and comfortable.



MAIN FEATURES OF A CRYOGENIC PROTECTIVE GLOVES :

- Ability to protect against cold contact for extended periods of time.
- Waterproof insulation from cryogenic liquids, without compromising flexibility and dexterity.
- Low temperature and cryogenic gas will not cause damage to the glove material.

UNIQUE CONSTRUCTION

- Cryogenic waterproof glove made of a special elastic and laminated blue fabric. Internal glove and cuff insulation polyester multilayer fleece (410g/m²) and polyolefin Porelle® membrane, 15 cm (6») cuff with NYLON®
- Stitching. Overall length of the glove 40 cm (16 in).
- Suitable for applications handling liquid nitrogen and other cryogenic gases to protect from cold contact and prevent burns from liquid gas leakage.

CRYOGENIC PROTECTIVE GLOVES

CRYOKIT 400



Protection from exposure to very low temperatures

CRYOKIT 550



The safe use of cryogenic liquified gas depends largely on the knowledge of their properties and compliance with simple common sense precautions.

GENERAL INFORMATION

General precautions are related to the common characteristics of all cryogenic liquified gas:

- Extremely low temperatures
- Evaporation of large volumes of gas from small amounts of liquid
- Tendency to accumulate cold vapor in the lower strata of the environment.

Specific precautions are necessary for certain gases: oxygen, i.e., prevent contact with substances that may react violently. It is very important that users have a thorough understanding of the instructions for use of devices and equipment, along with specific precautions suggested by the gas supplier.

COMMON HAZARDS

Exposure of the skin to very cold temperatures can cause damage similar to burns, with prolonged exposure frostbite can occur. Inhalation of vapors at low temperature can damage the lungs, cryogenic liquids or vapors can cause eye damage. In contact with cold surfaces (pipes or non-insulated vessels), the skin may adhere very firmly due to the freezing of moisture and tear when you try to remove. Excessive concentrations of oxygen increase the danger of fire and excessive concentrations of other gases, reduces the percentage of oxygen in the environment, creating the danger of asphyxiation.

PRECAUTIONS

WEAR SUITABLE PROTECTIVE CLOTHING AT LOW TEMPERATURES.

Protect your eyes with a face shield or goggles equipped with lateral protection. Always wear gloves made by nonabsorbent materials to handle objects that are or have been in contact with the liquid. The gloves should be comfortable, but fit loosely so they can be removed and discarded quickly in the event of accidental liquid penetration. The use of apron and overshoes are recommended in the decanting (transfer) operation.

FIRST AID IN CASE OF ACCIDENT TO EXPOSURE TO COLD

Wash affected areas with plenty of warm water and avoid rubbing and removing clothing, do not expose area to direct heat. If there are symptoms of frostbite, injury or extensive damage to the eyes get immediate medical assistance. Until medical assistance arrives protect the affected areas with soft, dry, clean & loosely wrapped material, avoid restricting circulation, keep the patient warm and still, and no alcoholic beverages.

Material

Special elastic and laminated blue fabric

Internal finish
Multilayer fleece (410g/m²) and polyolefin Porelle® membrane

External finish
Laminated fabric

Size
7 8 9 10 11

Length
16 in 41 cm

Internal finish
Multilayer fleece (410g/m²) and polyolefin Porelle® membrane

External finish
Laminated fabric

Size
8 9 10 11

Length
22 in 56 cm

CAT 3

EN388:2016



2422

EN511

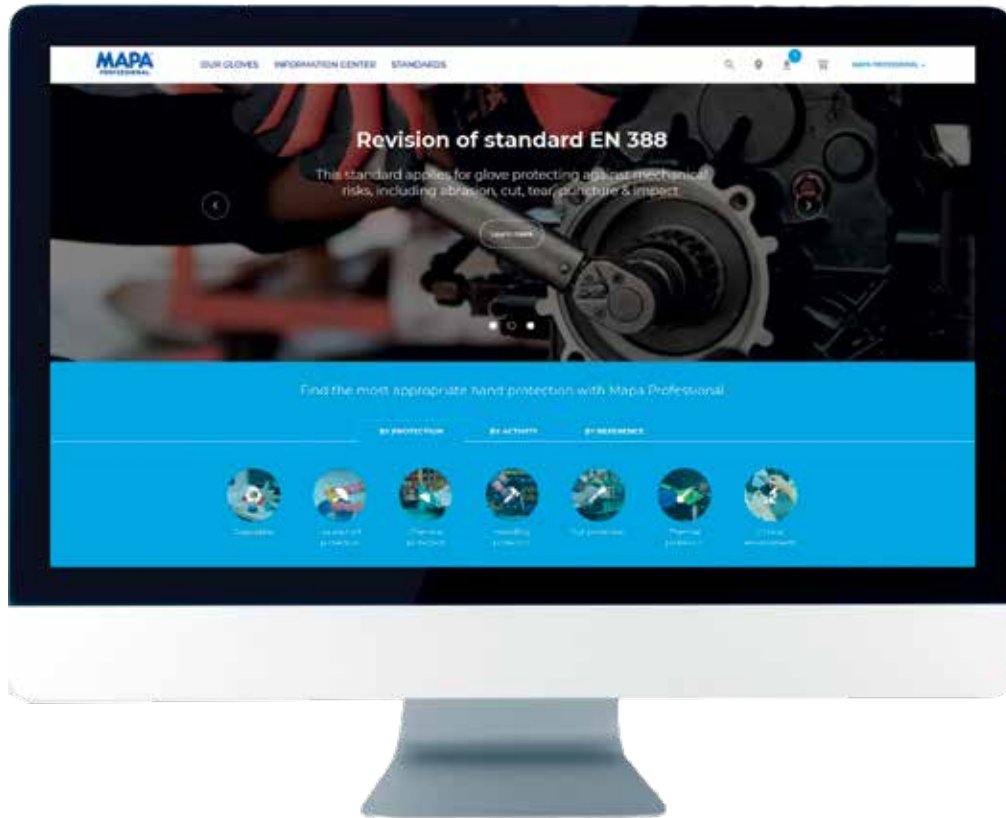


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