













































PRODUCT SPECIFICATION

Glove classification	Category	Picture	Product name	Standards	Length & thickness	Internal & external finish
G1 glove Relatively low potential risk	Chemical Protection Disposable		SOLO 977	  	24 cm 0.10 mm	Chlorinated Smooth with pebbled fingertips
G2 glove Higher potential risk	Chemical Protection Reusable		ULTRANITRIL 480	   	46 cm 0.55 mm	Chlorinated Non-slip embossing
			ULTRANITRIL 493	   	39 cm 0.55 mm	Flocked Non-slip embossing
			ULTRANITRIL 491	   	37 cm 0.38 mm	Flocked Non-slip embossing
			ULTRANITRIL 492	   	32 cm 0.38 mm	Flocked Non-slip embossing
			ULTRANITRIL 381	   	35,5 cm 0.95 mm	Mapa technology textile support Non-slip embossing
			ULTRANITRIL 485	   	31 cm 0.34 mm	Flocked Non-slip embossing
GR glove Re-entry tasks Partial hand protection glove	Handling Protection		ULTRANE 500		23-28 cm	Seamless knitted textile support Palm and fingers coated Gauge 13
			ULTRANE 525	 	23-28 cm	Seamless knitted textile support ¾ coated Gauge 13
			ULTRANE 526		23-28 cm	Seamless knitted textile support Full coated Gauge 13
	Cut Protection Level B		KRYTECH 580		23-28 cm	Seamless textile support from HDPE fibres Grip&Proof nitrile coating on palm and fingers Gauge 13
			KRYTECH 599	 	23-28 cm	Seamless knitted textile support of HDPE fibre 3/4 Grip&Proof nitrile coating Gauge 13
			KRYTECH 600		23-28 cm	Seamless knitted textile support of HDPE fibre Full coating in Grip&Proof nitrile Gauge 13



NEW

ISO 18889 STANDARD PROTECTION FROM PESTICIDES GLOVE SELECTION

FOR G2 GLOVES PROPER USE:

 Did you know that more than 95% of exposures occur during the preparation of spray pesticides mixtures? Do not handle pesticides without wearing suitable gloves

- 1 Before usage inspect the gloves for any **defect** or **imperfections**
- 2 Wash your hands with **soapy water** and **dry**
- 3 Don the glove
 - Length < 30 cm : put the glove **under** the chemical coverall sleeve
 - Length > 30 cm: put the glove **on top** of the chemical coverall sleeve and **turn the cuff over**



- 4 When the task is over, **wash your gloved hands**
- 5 **Do**ff the gloves and **store** them in **proper place**
- 6 Wash your hands with **soapy water**

Doffing & specific instructions of use available on mapa-pro.com



G1 gloves
Low potential risk tasks



G2 gloves
High potential risk tasks



GR gloves
Re-entry tasks

mapa-pro.com

A solution
for every hand
that works

MAPA[®]
PROFESSIONAL

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 to protect the hands and sometimes forearms against contact with those substances.

GLOVE CLASSIFICATION

Protective gloves are classified into 2 categories:



PERFORMANCE REQUIREMENTS

Protection	Test	Standard	Requirements		
			G1	G2	GR
Chemical	Penetration	EN 374-2	pass	pass	no requirement
	Permeation	EN ISO 374-1	min. Type C	min. Type B	≥ level 2 with letter K
		ISO 19918	≤ 10 µg/cm² with diluted pesticide	≤ 1 µg/cm² with diluted and concentrated pesticide	≤ 1 µg/cm² with diluted pesticide
Mechanical	Abrasion	EN 388		≥ level 2	≥ level 2
	Cut		no requirement	≥ level 1 or ≥ level A	≥ level 1 or ≥ level A
	Tear			no requirement	≥ level 1
	Puncture			≥ level 1	≥ level 1

TEST METHOD: ISO 19918

Measure the cumulative permeation which is the quantity of chemical (in µg/cm²) that permeates the glove material during a specified time.

Chemical used: pesticide surrogate EC-DY

Contact time:

- G1, G2, GR gloves: **1 hour** contact with surrogate EC-DY diluted at 2,5%
- G2 gloves: **15 minutes** contact with surrogate EC-DY concentrated

PRODUCTS SELECTION



Do not forget to check pesticides labels that clearly specify required protective gloves or refer to the manufacturer. It is important to wear the necessary gloves before handling pesticides and until the end of the cleaning of the equipment

G1 GLOVES

Disposable gloves

are often used for diluted pesticides handling and with no mechanical risk.



SOLO 977

The best single-use glove protection for tasks where dexterity is required. Good compromise between thickness, suppleness and resistance.

Applications:

sprayers & nozzles maintenance, tractor cabin filter change, short contact with treated seeds or crops



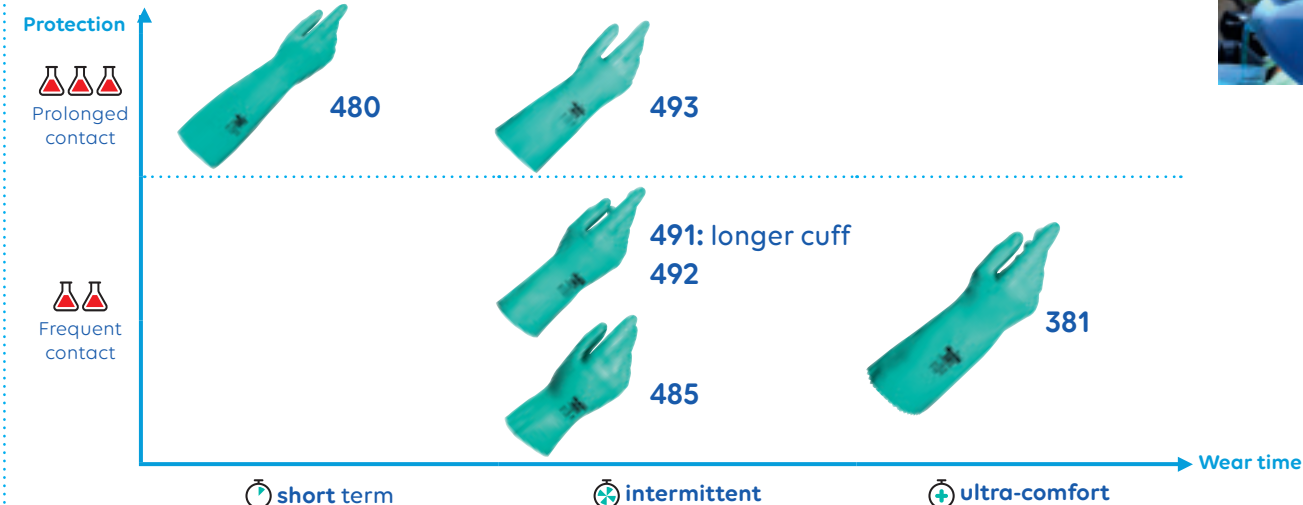
RELATIVELY LOW POTENTIAL CHEMICAL RISK

G2 GLOVES

Reusable chemical nitrile gloves

are often used for pesticides handling. They are suitable with most formulations and well suited to the work.

A selection of **ULTRANITRIL** gloves with an ensured grip among different lengths, thicknesses and internal finishes.



Applications:

spray mixtures preparation, tank filling, application & spreading on crops, pesticides waste management, treatment equipment cleaning.

HIGHER POTENTIAL RISK

GR GLOVES

Mechanical gloves

are often used for workers in contact with dry and partially dry pesticide residues that remain on the plant.

Applications:

treated plants handling, re-entry tasks

HANDLING PROTECTION

Gloves with assured grip and skin protected with excellent dexterity. Washable 3 times at 40°



ULTRANE 500
Palm and fingers coated



ULTRANE 525
¾ coated



ULTRANE 526
Full-coated



CUT PROTECTION

Gloves with moderate cut protection (level B) with optimal grip for precise handling.



KRYTECH 580
Palm and fingers coated



KRYTECH 599
¾ coated



KRYTECH 600
Full-coated

PARTIAL HAND PROTECTION GLOVE

GRIP & PROOF

OEKO-TEX®
CONFIDENCE IN TEXTILES
STANDARD 100
CQ 979/2 IFTH
Tested for harmful substances.
www.oeko-tex.com/standard100