













## Area of use\*







HEAVY INDUSTRIE

USTRIE LIGHT INDUS

## **Technical features**

**Liner:** aramid fibers, steel fibers and synthetic fibers, seamless knitted.

Gauge: 10.

Wrist: elastic knit with piping.

Coating: crinkle latex, coated on palm.

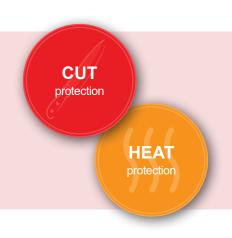
Colour: grey and blue.

**Sizes:** 7 to 11.

**Packaging:** carton of 100 pairs. **Subpackaging:** bag of 10 pairs.

## **Advantages**

- > Protection against cut with the TDM level E.
- > Non-irritating and easy to adjust with the seamless knitted liner.
- > Improved grip with the crinkled finish.
- > Back of the hand ventilated thanks to the only palm coating.
- > Quality and reliability of ISO 9001 / ISO 14001 certified production.
- > Antibacterial with Sanitized®/Actifresh treatment.



## Certification

This product complies with **European Regulation (EU) 2016/425** on Personal Protective Equipment (**PPE**). **Category II.** Issued by **SATRA**, notified body n°2777.







Download the EU declaration of conformity on http://docs.singer.fr

## EN ISO 21420 - PROTECTIVE GLOVES

General requirements and test methods. This standard specifies the essential requirements for ergonomics, safety, marking, information and instructions for use.

# EN 388 - AGAINST MECHANICAL RISKS



1	Abrasion resistance. Level 1 to 4 (4 being the best).
2	Blade cut resistance. Level 1 to 5 (5 being the best).
3	Tear resistance. Level 1 to 4 (4 being the best).
4	Puncture resistance. Level 1 to 4 (4 being the best).
F	Cut resistance (ISO13997). Level A to F (F being the best).
Р	Resistance against impact (according to EN 13594). Marking P (optional test).

For gloves that contain materials which can gets dulls to the blade, and additional compulsory test must be performed according to EN ISO 13997 test method (TDM 100 tester).

This test may also be optional for gloves that do not dull the blade.

#### EN 374 - ACAINST CHEMICALS

EN 3/4 - AGAINST CHEMICALS						
Г		Type A	Breakthrough time ≥ 30 min for at least 6 chemicals of the list (see below)			
T.	rpe X	Type B	Breakthrough time ≥ 30 min for at least 3 chemicals of the list (see below)			
	X.X	Type C	Breakthrough time ≥ 10 min for at least 1 chemical of the list (see below)			
Α	Methanol		67-56-1	Primary alcohol		
В		Acetone	67-64-1	Ketone		
С		Acetonitrile	75-05-8	Nitrile composite		
D	Di	chloromethane	75-09-2	Chlorinated hydrocarbon		
Е	Car	bone Disulphide	75-15-0	Organic compound containing Sulphur		
F		Toluene	108-88-3	Aromatic hydrocarbon		
G		Diethylamine	109-89-7	Amine		
Н	Tet	trahydrofuranne	109-99-9	Heterocyclic Ether		
I	Ethyl acetate		141-78-6	Ester		
J		n-Heptane	142-82-5	Saturated Hydrocarbon		
K	Sodiu	ım hydroxide 40%	1310-73-2	Inorganic base		
L	Sul	phuric acid 96%	7664-93-9	Inorganic mineral acid, oxidising		
M	Nitr	ic acid (65±3) %	7697-37-2	Inorganic mineral acid		
N	Ace	tic acid (99±1) %	64-19-7	Organic acid		
0	A	mmonia 25%	1336-21-6	Organic base		
Р	Hydr	ogen peroxid 30%	7722-84-1	Peroxide		
S	Hydr	rofluoric acid 40%	7664-39-3	Inorganic mineral acid		
Т	For	maldehyde 37%	50-00-0	Aldehyde		
Classe 1		Breakthrough time: > 10 minutes				
Classe 2				Breakthrough time: > 30 minutes		
Classe 3				Breakthrough time: > 60 minutes		
Classe 4				Breakthrough time: > 120 minutes		
Classe 5			Breakthrough time: > 240 minutes			
	Cla	asse 6		Breakthrough time: > 480 minutes		

#### A STM E2979 DUNCTUDE DECICTANCE TO AN LIVEODEDMIC NEEDLE



	Level 1	Puncture resistance with a less or an equal force to 2 N.
	Level 2	Puncture resistance with a less or an equal force to 4 N.
	Level 3	Puncture resistance with a less or an equal force to 6 N.
	Level 4	Puncture resistance with a less or an equal force to 8 N.
	Level 5	Puncture resistance with a less or an equal force to 10 N.

#### EN 374-5 - AGAINST MICRO-ORGANISM



Protection against bacteries and fungi

VIRUS = with additional permeation test to virus (ISO16604)

#### EN 511 - AGAINST THE COLD



Α	Convective cold. Level 0 to 4 (4 being the best).
В	Contact cold. Level 0 to 4 (4 being the best).
С	Waterproofness. Level 0 (No) or 1 (Yes).

EN 407 - AGAINST THERMAL RISKS (HEAT AND/OR FIRE)			
Protection against fire:	Α	Burning behaviour. Level 1 to 4 (4 being the best).	
	В	Contact heat (threshold time $\geq$ 15 s). Level 1 to 4 (4 being the best). 1= $100^{\circ}$ C/ $\geq$ 250°C/3= 350°C/4= 500°C	
A.B.C.D.E.F	С	Convective heat. Level 1 to 4 (4 being the best).	
Protection against heat:	D	Radiant heat. Level 1 to 4 (4 being the best).	
()))	E	Small splashes of molten metal. Level 1 to 4 (4 being the best).	
X.B*.C.D.E.F (*) Max: Level 2	F	Large spashes of molten metal. Level 1 to 4 (4 being the best).	

	EN 12477 + A1 - FOR WELDERS			
	Type A	More general welding and cutting operations		
	Type B	Higher dexterity for TIG welding		

ISO 18889 - PESTICIDE HANDLING				
<b>A</b> =	G1	Low potential risk. Diluted pesticides. Without mechanical resistance.		
	G2	Medium potential risk. Diluted or concentrated pesticides.  Minimum mechanical resistance.		
Х	GR	Palm protection only. Dry residues of pesticides.		

#### EN ISO 10819 - VIBRATION AND MECHANICAL SHOCKS

Hand-arm vibration. Measurement and evaluation of the vibration transmissibility from gloves to the palm of the hand.

## **EN 16350 -** ELECTROSTATIC PROPERTIES



Each individual measurement shall satisfy: the vertical resistance requirement: Rv < 1,0 x 10 $^{\rm s}$   $\Omega$ . Test method according to EN 1149-2: 1997.

EN 60903 - MAXIMAL TENSION OF USE					
	AC	DC	Class		
	750 V	500 V	00		
$\wedge$	1 500 V	1 000 V	0		
$\Delta$	11 250 V	7 500 V	1		
	25 500 V	17 000 V	2		
	39 750 V	26 500 V	3		
	54 000 V	36 000 V	4		

"X" means that the glove has not been submitted to the test.