PIC13F

AGAINST PUNCTURE

Area of use*

LIGHT INDUSTRY | FINISHINGS | GREEN SPACES

Technical features

Support: high density polyethylene and elastane, seamless knitted.
Gauge: 13.
Wrist: elastic knit with piping.
Lining: First layer, silica. Second layer, stainless steel on palm and fingertips. Third layer, cotton.
Coating: sandy nitrile, coated on palm.
Pierce resistant layer: metal knitted layer and cotton-lined silica film, on the palm and on fingertips.
Anti-wear reinforcement: fingertips.
Colour: black and blue.
Sizes: 6 to 11.
Packaging: carton of 50 pairs.
Subpackaging: bag of 5 pairs.

Advantages

> **Puncture resistance** with the anti-perforation layer.
> **Non-irritating and easy to adjust** with the seamless knitted support.
> **Good support of the glove** with the elastic knitted wrist.
> **Improved grip** with the sandy finish.
> **Back of the hand ventilated** thanks to the only palm coating.
> **Quality and reliability** of ISO 9001 / ISO 14001 certified production.

CUT protection

Certification

This product complies with **European Regulation (EU) 2016/425** on Personal Protective Equipment (**PPE**). **Category II.**
Issued by **CTC**, notified body n°**0075**.

EN 388 : 2016

4 X 4 3 F

ASTM F2878

Level 3

ANSI

A9

CUT

ASTM F 2992 : Cut resistance

Cut resistance of a material mounted on a mandrel and subjected to a cutting edge under a specified load using the tomodynamometer (TDM-100). The weight needed in grams to cut the material over a length of 20mm is measured according to a classification from A1 to A9, detailed in ANSI-ISEA 105 as follows:

Level	Weight	Level	Weight	Level	Weight
A1	≥ 200g	A4	≥ 1500g	A7	≥ 4000g
A2	≥ 500g	A5	≥ 2200g	A8	≥ 5000g
A3	≥ 1000g	A6	≥ 3000g	**A9**	**≥ 6000g**

CE

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

(*) Example of use given as a guide only. The end user must check whether the product is suitable or not for the intended use.
Before any use, read carefully the instructions enclosed with the product.

SINGER safety

EN 420: 2003 + A1 2009 - 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

1.2.3.4.F.P

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).
P	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 - AGAINST CHEMICALS

Type X
X.X.X

Type A	Breakthrough time ≥ 30 min for at least 6 chemicals of the list (see below)
Type B	Breakthrough time ≥ 30 min for at least 3 chemicals of the list (see below)
Type C	Breakthrough time ≥ 10 min for at least 1 chemical of the list (see below)

A	Methanol	67-56-1	Primary alcohol
B	Acetone	67-64-1	Ketone
C	Acetonitrile	75-05-8	Nitrile composite
D	Dichloromethane	75-09-2	Chlorinated hydrocarbon
E	Carbone Disulphide	75-15-0	Organic compound containing Sulphur
F	Toluene	108-88-3	Aromatic hydrocarbon
G	Diethylamine	109-89-7	Amine
H	Tetrahydrofuranne	109-99-9	Heterocyclic Ether
I	Ethyl acetate	141-78-6	Ester
J	n-Heptane	142-82-5	Saturated Hydrocarbon
K	Sodium hydroxide 40%	1310-73-2	Inorganic base
L	Sulphuric acid 96%	7664-93-9	Inorganic mineral acid, oxidising
M	Nitric acid (65±3) %	7697-37-2	Inorganic mineral acid
N	Acetic acid (99±1) %	64-19-7	Organic acid
O	Ammonia 25%	1336-21-6	Organic base
P	Hydrogen peroxid 30%	7722-84-1	Peroxide
S	Hydrofluoric acid 40%	7664-39-3	Inorganic mineral acid
T	Formaldehyde 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
Classe 6	Breakthrough time: > 480 minutes

ASTM F2878 - PUNCTURE RESISTANCE TO AN HYPODERMIC NEEDLE

Level X

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-ORGANISMS

VIRUS

Protection against bacteries and fungi
VIRUS = with additional permeation test to virus (ISO16604)

EN 511 - AGAINST THE COLD

A.B.C

A	Convective cold. Level 0 to 4 (4 being the best).
B	Contact cold. Level 0 to 4 (4 being the best).
C	Waterproofness. Level 0 (No) or 1 (Yes).

EN 407 - AGAINST THERMAL RISKS (HEAT AND/OR FIRE)

Protection against fire:

A.B.C.D.E.F

Protection against heat:

X.2.C.D.E.F

A	Burning behaviour. Level 1 to 4 (4 being the best).
B	Contact heat (threshold time ≥ 15 s). Level 1 to 4 (4 being the best).
C	Convective heat. Level 1 to 4 (4 being the best).
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).
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

EN 381-7 - AGAINST HAND-HELD CHAIN SAWS

Class 0	Resistance against a saw turning at 16 m/s
Class 1	Resistance against a saw turning at 20 m/s
Class 2	Resistance against a saw turning at 24 m/s
Class 3	Resistance against a saw turning at 28 m/s

Model A or B depending on the specified protection area

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: $Rv < 1,0 \times 10^8\ \Omega$.
Test method according to EN 1149-2: 1997.

EN 60903 - MAXIMAL TENSION OF USE

AC	DC	Class
750 V	500 V	00
1 500 V	1 000 V	0
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.