

# GUANTE GUANTES DE NITRILO JUBA - 821 INTERFACE PLUS

Supportless nitrile glove



## NORMATIVE



CAT.III

EN 388:2016+A1:2018



4101X

ISO18889:2019



G2

ENISO374-5:2016



VIRUS

ENISO374-1:2016



AJKLMNOPT



## ESPECIALES

## CHARACTERISTICS

- Chlorinated for greater chemical resistance, reduces soluble proteins and residual accelerators.
- Cotton interior flocking to absorb sweat and provide the user with greater comfort.
- Non-slip pattern for optimal grip in wet, dry and oily environments.
- Very good resistance to abrasion.
- Resistance to solvents.
- Suitable for food use
- Individual bag for point of sale.
- This glove protects against the following chemicals: Methanol (level 2,> 30 minutes), Toluene (level 1,> 10 minutes), n-Heptane (level 6,> 480 minutes), 40% Sodium Hydroxide (level 6,> 480 minutes), Sulfuric acid 96% (level 3,> 60 minutes), Nitric acid 65% (level 2,> 30 minutes), Acetic acid (level 3,> 60 minutes), Ammonium hydroxide 25% (level 6,> 240 minutes), Hydrogen peroxide 65% (level 6,> 480 minutes) and Formaldehyde

## WORKING GLOVES SUITABLE FOR:

- Paint, varnish and universal solvent industry.
- Machining of parts.
- Petrochemical industry.
- Aviation and automotive industry.
- Phytosanitary treatments
- Chemical industry.
- Food industry.
- Food processing.

37% (level 6,> 480 minutes).

- For bacteria and fungi this glove is totally watertight according to EN 374-2: 2014.

## MORE INFO

Materials	Colour	Thickness	Length	Sizes	Packaging
Nitrile	Green	0.38 mm	XS - 33 cm S - 33 cm M - 33 cm L - 33 cm XL - 33 cm	6/XS 7/S 8/M 9/L 10/XL	12 pairs/package 144 pairs/box

## NORMATIVAS

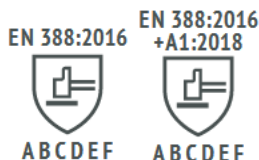
### EN388:2016



#### EN388:2016 Protective gloves against mechanical risks.

The EN388: 2003 standard is renamed EN388: 2016, the year of its revision. The reason for the modification is given by the discrepancies in the results between laboratories in the knife cut test, COUP TEST. Materials with high levels of cut produce a dulling effect on the circular blades, which undermines the result.

The new regulation was published in November 2016 and the previous one is from the year 2003. During these 13 years, there has been a great innovation in the materials for the manufacture of cutting gloves, they have forced to introduce changes in the tests to be able to measure with more rigorous levels of protection. If you want to know more about the main changes in these regulations, you can consult it through our website [www.jubappe.es](http://www.jubappe.es)



- A - Abrasion resistance (X, 0, 1, 2, 3, 4)  
 B - Blade Cut Resistance (X, 0, 1, 2, 3, 4, 5)  
 C - Tear resistance (X, 0, 1, 2, 3, 4)  
 D - Puncture resistance (X, 0, 1, 2, 3, 4)  
 E - Cutting by sharp objects ISO 13997 (A, B, C, D, E, F)  
 F - Impact test complies / does not comply (It is optional. If it complies, put P)

En388:2016 performance levels	1	2	3	4	5
6.1 abrasion resistance (cycles)	100	500	2000	8000	-
6.2 blade cut resistance (index)	1,2	2,5	5	10	20
6.4 tear resistance (newtons)	10	25	50	75	-
6.5 puncture resistance (newtons)	20	60	100	150	-

Eniso13997:1999 performance levels	A	B	C	D	E	F
6.3 tdm: cut resistance (newtons)	2	5	10	15	22	30

**ISO18889:2019**



Minimum requirements for workers in contact with pesticides.

**ISO 18889:2019**



**G1**

- Chemical protection all over the hand.
- Relatively low potential risk.
- Handling of diluted pesticides.
- No mechanical hazards.
- Disposable: minimum length 240 mm.

**ISO 18889:2019**



**G2**

- Chemical protection all over the hand. Increased potential risk
- More protection than the G1.
- Handling of concentrated or diluted pesticides.
- Minimum length 290 mm.
- Minimum mechanical protection: abrasion - level 2, cutting - level 1 or letter A and perforation - level 1.

**ISO 18889:2019**



**GR**

- Partial hand protection (fingers and palm):
- Minimum mechanical protection for handling tasks: abrasion-level 2, cutting – level 1 or A, tearing – level 1 and perforation – level 1.
- For users in contact with partially dried or dried pesticide residues existing on the plant after applying the pesticide.
- They cannot be used to replace the G1 or G2 that protect the whole hand.
- A breathable material on the back of the glove enhances comfort.

Sub-clause	Action design requirements	Standard;clause	Requirements		
			G1	G2	Gr
4.1	General requirements	Iso 21420	Compliant	Compliant	Compliant
4.2.1	Penetration test	En 374-2:2014, 7.2 y 7.3	Pass	Pass	
4.2.2.1	Resistance to permeation	Iso 374-1	≥typec	≥type b	≥level2 with chemical k
4.2.2.2	Resistance to permeation	Iso 19918	≤ 10 ug/cm2	≤ 1 ug/cm2	≤ 1 ug/cm2
4.2.3.1	Glove length		Compliant	Compliant	
4.2.3.2	Coated area				Compliant
4.2.4	Mechanical requirements	Iso 23388:2018, 6.1 iso 23388:2018, 6.2 iso 23388:2018, 6.3 iso 23388:2018, 6.4 iso 23388:2018, 6.5		≥ level 2 ≥ level 1 o ≥ level a ≥ level 1	≥ level 2 ≥ level 1 o ≥ level a ≥ level 1 ≥ level 1

**ENISO374-1:2016**



EN ISO 374-1:2016

TIPO X



XXXXXX

EN ISO 374-5:2016



The EN374: 2003 standard is renamed ENISO374: 2016. The purpose of this standard is to classify gloves according to their behavior when exposed to chemical substances.

They are divided into the following parts:

**EN ISO 374-1:2016** - Terminology and performance requirements for chemical risks.

**EN 374-2:2014** - Determination of resistance to penetration.

**EN 16523-1:2015 + A1:2018** - Permeation by liquid chemicals under continuous contact conditions.

**EN ISO 374-4:2019** - Determination of resistance to chemical degradation.

**EN ISO 374-5:2016** - Terminology and requirements demanded for risks of microorganisms.

#### Gloves classification according to ENISO374-1: 2016

Gloves are divided into three types:

EN ISO 374-1:2016

TIPO A



UVWXYZ

**TYPE A**

Step time ≥ 30 min for at least 6 products

EN ISO 374-1:2016

TIPO B



XYZ

**TYPE B**

Step time ≥ 30 min for at least 3 products

EN ISO 374-1:2016

TIPO C



**TYPE C**

Step time ≥ 10 min for at least 1 products

Letter	Chemical substance	Cas number	Class
A	Methanol	67-56-1	Primary alcohol
B	Acetone	67-64-1	Cetone
C	Acetonitrile	75-05-8	Nitrile compound
D	Dichloromethane	75-09-2	Chlorine hydrocarbon
E	Carbon disulfide	75-15-0	Sulphate organic compound
F	Toluene	108-88-3	Aromatic hydrocarbon
G	Diethylamine	109-89-7	Amine
H	Tetrahydrofuran	109-99-9	Heterocyclic ether
I	Ethyl acetate	141-78-6	Ester
J	N-heptane	142-85-5	Saturated hydrocarbon
K	Sodium hydroxide 40%	1310-73-2	Inorganic alkaline
L	Sulphuric acid 96%	7664-93-9	Inorganic, oxidising mineral acid
M	Nitric acid 65%	7697-37-2	Inorganic, oxidising mineral acid
N	Acetic acid 99%	64-19-7	Organic acid
O	Ammonia hydroxide 25%	1332-21-6	Organic alkaline
P	Hydrogen peroxide 30%	7722-84-1	Peroxide
S	Hydrofluoric acid 40%	7664-39-3	Mineral organic acid
T	Formaldehyde 37%	50-00-0	Aldehyde

#### Levels of resistance to permeability

Taverage penetration time	Performance levels	Average penetration time	Performance levels
> 10	Class 1	> 120	Class 4
> 30	Class 2	> 240	Class 5
> 60	Class 3	> 480	Class 6

#### Gloves classification according to EN374-2:2014

It is the advance of chemical products through the material, seams of the glove at a non-molecular level. Air leak test: the glove is inflated with air and immersed in water. The appearance of air bubbles is controlled within 30 '. Water leak test: the glove is filled with water and the appearance of water droplets is controlled. If these tests are positive, the pictogram will be put on.

**Gloves classification according to EN374-4: 2013**

Detriment to some of the glove's properties due to contact with a chemical. Eg: discoloration, hardening, softening, etc. Permeation test EN 16523-1. It is the advancement of chemicals at the molecular level. The resistance of the glove material to permeation by a chemical is determined by measuring the time it passes through the material.

**Modification of the ENISO374-5: 2016 standard**

When the glove passes the test described for virus protection, the word "virus" will appear under the pictogram. If nothing appeared, protection would only be assured against bacteria.