

GET TO GRIPS WITH HAND PROTECTION

HEALTH & SAFETY FOR YOUR HANDS


Hands at work are extremely vulnerable to a wide range of hazards which include cuts, blows, chemical attack and temperature extremes. With industry's increasingly complex and sensitive manufacturing and handling processes, there is a growing insistence on the use of "job fitted" gloves that meet each user's specific requirements; hence our offering of a wider and more comprehensive range of gloves in this section – in excess of 200 different types and styles from which to choose.

The importance of glove maintenance

Contaminated and damaged gloves may fail to protect the hands from the very hazard they were designed for. Effective protection is maintained by regular replacement of the gloves. Check the condition of the gloves, inside and out before use.

YOUR GUIDE TO SAFETY STANDARDS AND CHOOSING THE RIGHT HAND PROTECTION

European Standards

 Implies that the gloves comply with the basic requirements laid down by the EC Regulation: Personal Protective Equipment.

Simple Design (Category I)

For areas of 'minimal risk' where the effects of not wearing a glove are easily reversible or superficial. Such products are self-certified.

Intermediate Design (Category II)

For areas of specific risk i.e. mechanical risks. Such products will have been EC type tested against European test methods and certified by a notified body.

Complex Design (Category III)

For areas/applications that can seriously or irreversibly harm the health. Such products, in addition to the CE type test, will also have to be either produced under an approved quality system OR be type tested on an annual basis.



SAFETY STANDARDS SYMBOLS AND WHAT THEY EACH REPRESENT


What to look out for


Each glove has its own individual rating for each standard it qualifies for. Against each product there will be a prominent 'standards box' (as per the example shown on the left) clearly displaying the particular safety standards that the glove complies with. This will help you quickly see what you need to know about the glove, helping you shop more efficiently.


YOUR GUIDE TO GLOVE TYPES

	Cut Resistant Protects hands from sharp tools or objects
	Puncture Resistant Protection against getting pierced or pricked
	Chemical Resistant Protection from harmful chemicals/substances
	General Purpose Protects hands when performing general tasks
	Electrical Protection Protects the wearer from electric shocks
	Heat/Flame/Arc Protection Protection when handling hot objects
	Cold Protection Protects hands when handling cold objects
	Disposable Protects against cross-contamination
	Mechanics Protects hands in general assembly environment
	Anti-Impact Protects hands from impact damage
	Anti-Vibration Protection from vibration
	Water Resistant Protects against wet conditions
	Touch-Screen Enables you to use a touch-screen device


What the symbols represent


 **EN 388** – This standard applies to all kinds of protective gloves giving protection from mechanical risks, in respect of physical problems caused by abrasion, blade cut, tearing or puncture. This standard also covers risk of electrostatic discharge.


 **EN 374** – This standard specifies the capability of gloves to protect the user against chemicals and/or micro-organisms.


 **ABC** Chemical resistant – The 3 letter code applies to the chemicals it is resistant to.


 Low chemical resistance to unspecified chemicals.

 **EN 511** – This standard applies to gloves which protect the hands against convective and contact cold.

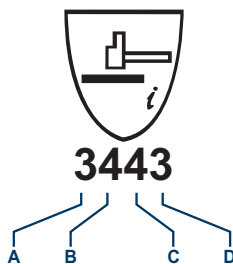
 **EN 407** – This standard specifies thermal performance for protective gloves against heat and/or fire.

 **EN 659** – This standard defines performance requirements for gloves designed to protect fire fighters against heat and flames.

 **EN 421** – This standard lays down test methods and performance criteria for gloves offering protection against ionising radiation and radioactive contamination.

 **EN 455** – Medical gloves for single use.
If a glove is to be used for food handling, it is required to carry either the words 'for food use' or this symbol.

What the numbers represent



Mechanical Hazards: EN 388

	Performance Level
(a) Abrasion resistance	0-4
(b) Blade-cut resistance	0-5
(c) Tear resistance	0-4
(d) Puncture resistance	0-4

The same method applies to these two standards below also.

Thermal Hazards: EN 407

	Performance Level
(a) Burning behaviour	0-4
(b) Contact heat	0-4
(c) Convective heat	0-4
(d) Radiant heat	0-4
(e) Small splashes of molten metal	0-4
(f) Large splashes of molten metal	0-4

Contact Heat

A sample is taken from the palm area of a glove. The outside of the glove is put on a hot surface and the temperature of the inside of the glove is then monitored. The temperature on the inside of the glove must take 15 seconds or more to rise by 10°C from room temperature.

EN 407 Performance Level	Contact Temperature °C	Threshold Time Seconds
1	100	>15
2	250	>15
3	350	>15
4	500	>15

EN 511: Cold

	Performance Level
(a) Resistance to convection cold	0-4
(b) Resistance to contact cold	0-4
(c) Permeability to water	0-1

TAKE NOTE... CHANGES ARE BEING MADE

CHANGES TO EC STANDARD EN 388

During 2016 a new version of EN 388, Protection against Mechanical Hazards, was published. It allows products offering higher classifications of cut levels to be identified.

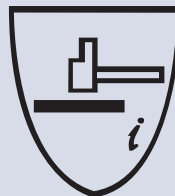
What changed

Any sample tested for cut resistance using the existing coup method, which blunts the blade used in the test, will have to be additionally tested using the ISO cut method.

There will be 6 cut levels defined on the ISO cut method. Levels A, B and C are new. Level D is of a different value to the level previously quoted as 4. Level E is the same value previously quoted as level 5. Level F is also new and is the highest cut resistance value.

LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F
2	5	10	15	22	30

Back of hand protection (impact protection testing) is now included.



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- 3** means the sample achieved level 3 for abrasion
- 4** means the sample achieved level 4 for coup cut
- 4** means the sample achieved level 4 for tear
- 3** means the sample achieved level 3 puncture
- E** means the sample achieved level E for ISO cut which was tested due to blade blunting during the coup test
- P** means the sample passes requirements for impact protection

What it means to you

- This change only affects new products being certified once the standard has been published
- As with any new PPE standard, it does not apply retrospectively
- Over the next few years, you will see more and more products carrying this standard
- EN420: General requirements for Protective Gloves – New Test Method being added (prEN 16778) for the determination of the presence of Dimethylformamide (DMF), a toxic ingredient of insecticide sometimes used in the leather tanning process
- prEN374-1: Mandatory Challenge Chemicals increased to 18 from 12 & Creation of 3 levels of Permeation Testing, i.e. Type A gloves (Must pass on 6 Challenge chemicals), Type B Gloves (3 Challenge Chemicals) & Type C Gloves (1 Challenge chemical)
- EN374-2: Claims for micro-organism resistance must now satisfy EN374-5. If virus protection is claimed, it must pass ISO 16604 (EN374-2 for bacteria & fungi)
- EN374-3: Permeation of pesticides now included and the Standard for this hazard will now fall under EN16523-1
- EN374-4: Determination of Resistance to Degradation determined by measuring the permeation resistance before and after 60 mins. exposure to a chemical. Degradation results must be included in the User Information for those chemicals which correspond to the letters under the pictogram