

## **CE CATEGORY INFORMATION**

The personal protective Equipment Directives (89/686/CEE) and (93/68/CEE) have been enacted by the European Community to ensure harmonization of regulations regarding testing of all PPE sold within the community. All gloves of intermediate and complex design must now be tested independently to ascertain their performance and ensure their safety. They must, if they meet these standards, carry a CE Mark on the gloves or their packaging when it is not practical.

### **Cat. I CE Category I.**



Simple Design- for minimal risks only. Suitable only for low risk applications where hazards can be identified by the wearer in time to deal with them.

### **Cat. II CE Category II.**



Intermediate Design- reversible risks. Products are type examined by an approved body where they examine the manufacturer's technical specifications and conduct tests for the relevant standards to ascertain their conformity and/or performance.

### **Cat. III CE Category III.**



Potentially fatal risks, for example in activities where toxic or highly corrosive chemicals are handled. The glove must meet the standards set out for this category. Its compliance is not only certified but also checked by a notified body, the reference number of which is located below the CE logo.

**0120**

## **EN (EUROPEAN) STANDARDS** **INFORMATION**



### **EN 388 MECHANICAL RISKS.**

The glove's resistance to abrasion, cutting, tearing puncturing is laboratory tested. The figures shown for each glove, beneath the symbol for this standard, should be interpreted as follows:

#### **PERFORMANCE LEVELS**

(a): **0 to 4**

(b): **0 to 5**

(c): **0 to 4**

(d): **0 to 4**

#### **REQUIREMENTS:**

**RESISTANCE TO ABRASION (A)**

Number of cycles required for the sample to fail, at a constant speed.

#### **RESISTANCE TO CUTTING BY SLICING (B)**

Index calculated from the number of cycles required to cut the sample at a constant speed.

#### **RESISTANCE TO TEARING (C)**

Force required to tear the sample.

#### **RESISTANCE TO PUNCURING (D)**

Force required to pierce the sample with a standard steel punch.



### **EN 374-3 CHEMICAL RISKS**

The time taken to penetrate the glove (permeation) is measured in a laboratory. To find out the chemical resistance of the materials used, check the table Comparison Chart on the site.

#### **PERFORMANCE LEVELS:**

**0 to 6**

#### **REQUIREMENTS:**

PERMEATION



### **EN 511 Cold-related Risks**

The tests determine the glove's level of performance in cold climates or artificially cold environments where the cold is transferred by convection and/or through contact. It may also be mentioned whether the glove is waterproof.

#### **PERFORMANCE LEVELS**

(a): 0 to 4

(b): 0 to 4

(c): 0 to 1

**REQUIREMENTS:**  
**RESISTANCE TO CONVECTIVE COLD (A)**  
**RESISTANCE TO CONTACT COLD (B)**  
**IMPERMEABILITY TO WATER (C)**



**EN 374-2 Micro-organisms Risks**

The glove is deemed to be resistant to micro-organisms if it has successfully undergone the penetration test this standard requires.

**REQUIREMENTS:**

**PENETRATION** – air or water leakage test



**2002/72 EC Food Compatability**

European directive 2002/72 (which replaces 90/128/EEC) governs the conditions and restrictions that all plastic materials and objects must comply with if they are intended to come into contact with foods.

**EN1149-1 Antistatic properties**

The glove attains the levels of resistivity required by this standard in terms of electrostatic conduction or dissipation.

## **GLOVES STANDARDS**

To conform with European legislation, all gloves supplied as personal protective equipment must comply with the Personal Protective Equipment Directive [implemented into UK law by The Personal Protective Equipment (EC Directive) Regulations 1992] and be CE marked.

Products such as gardening gloves, of “simple design”, protecting from minor risk of injury can be self-certified by the manufacturer or importer. Gloves worn to protect the user from potentially life threatening risks must be independently tested by an approved test house to an appropriate European Standard. A summary of the main glove standards is given below:

- BS EN 420** General requirements for all gloves  
(Sizing, product and packaging information and marking, etc.)
- BS EN 374-2** Resistance to penetration by micro-organisms
- BS EN 374-3** Resistance to chemical hazards
- BS EN 381** Chainsaw hazards
- BS EN 388** Protect against mechanical hazards
- BS EN 407** Protect against heat and fire
- BS EN 421** Protect against ionising radiation
- BS EN 511** Protect against low temperature
- BS EN 659** Firefighters’ gloves

One of the important benefits of the standards is marking, which reduces the possibility of gloves being used incorrectly.




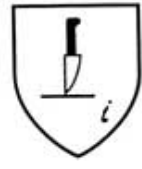


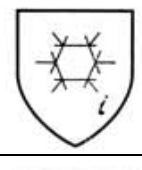

Gloves in the “simple design” category (protecting against minor risk) will have packaging marked with the words “For minimal risks only”. Other gloves will have more information on the packaging, including:

- The CE mark – showing it conforms to the appropriate standard, with the approved body identification number

- A pictogram indicating the gloves protective properties

- A series of numbers accompanying the pictogram, indicating its performance in the various tests applicable to that standard.

## **GLOVES STANDARDS AND ASSOCIATED MARKINGS**

STANDARD	PICTOGRAM	DESCRIPTION	RATING
BS EN 374 – 2 Micro-organisms		Resistance to penetration by micro-organisms	1-6
BS EN 374 – 3 Chemical Hazards		Resistance to chemical permeation	1-3
BS EN 388 Mechanical Hazards		a) Resistance to abrasion b) Blade cut resistance c) Tear resistance d) Puncture resistance	0-4 0-5 0-4 0-4
		Impact Cut	Pass/Fail
		Static Electricity	Pass/Fail
BS EN 407 Thermal Hazards		a) Burning behaviour b) Contact heat c) Convective heat d) Radiant heat e) Small splashes of molten metal f) Large splashes of molten metal	0-4 0-4 0-4 0-4 0-4 0-4 x = test NA
BS EN 511 Protection from Cold		a) Resistance to convective cold b) Resistance to contact cold c) Permeability to water	0-4 0-4 0-1
BS EN 421 Radioactive Contamination		Resistance to ionising radiation (the amount of lead in the glove is marked on it)	

**Note: For ratings, the higher the number the higher the level of performance**