

# Hand Protection

## Introduction

### You are in safe hands

Employees' hands need protection in a hazardous environment. The Personal Protective Equipment at Work Act (1992) sets out the employer's duty of care to people exposed to risk in the workplace – to keep hands safe from danger.



BOC has a wide range of safety gloves to suit all needs. We can help you to determine which product best suits – as well as advise on sizing, the right fabric and the EN compliance standard in relation to a potential hazard.

All BOC-supplied safety gloves satisfy legal standards. They carry the CE-mark and, where appropriate, the European Standard EN 420 confirming them fit-for-purpose. Our range falls into three categories:

#### 1. Simple Design:

Protects against minor risk, that is superficial damage that quickly mends. Gloves in this category come with basic CE classification

#### 2. Intermediate Design:

Protects against specific risks such as mechanical and/or chemical hazards. These gloves are scientifically tested and carry both CE and EN classifications showing the different environments they are best suited to.

#### 3. Complex Design:

Protects against specific danger where inadequate protection risks serious, irreversible injury. These specialist gloves are scientifically tested and ISO certified.

### How to get the right glove size

The right size gloves will afford maximum protection. The two important measures are:

- Hand width, clench the hand in a loose fist and measure around the widest part of the palm
- Hand length: measure from the tip of the middle finger to the base of the palm.

Check these two measurements against the table below. If you fall between two sizes, always opt for the larger pair.

Width (mm)	EU sizes	Length (mm)	EU sizes
152-178	EU – 6	160	EU – 6
178-203	EU – 7	171	EU – 7
203-229	EU – 8	182	EU – 8
229-254	EU – 9	192	EU – 9
254-279	EU – 10	204	EU – 10
279 plus	EU – 11	215	EU – 11

BOC's range of protective gloves is affordable, comfortable, high-quality and includes trusted brands such as NORTH, Ansell, Mutexil, Marigold and IMPACTO. It will help to improve health and safety in the workplace.

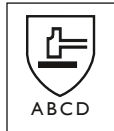


## Choosing the right level of glove protection for your workplace:

### Simple – Mechanical Hazards

#### EN 388

Guards against mechanical hazards including sharp objects which could cut, pierce or scratch the skin. The higher the resistance score, the better the performance. The glove resistance is represented in the adjacent pictogram using the letter code below:



Letter Code	Level	Resistance Type
A	0-4	Abrasion
B	0-5	Blade cut
C	0-4	Tear
D	0-4	Puncture
X		Test is non-applicable or unsuccessfully completed

### Intermediate – Chemical Hazards

#### EN 374

Liquid-proof gloves that protect hands against chemical hazards and risk of inflammation, irritation or burning. Only those displaying the EN374 symbol are certified chemical-resistant. EN374 labelled gloves are scored 0-6. The higher the number, the better the protection against penetration and permeation against dangerous chemicals and micro-organisms. Letter codings signifying what the gloves protect against:



Letter Code	Chemical Product
A	Methanol
B	Acetone
C	Acetonitrile
D	Dichloromethane
E	Carbon Disulphide
F	Toluene
G	Diethylamine
H	Tetrahydrofurane
I	Ethyl Acetate
J	n-Heptane
K	Sodium Hydroxide 40%
L	Sulphuric Acid 96%

#### EN 374-2

Low resistance gloves offering less than 30 minutes protection against breakthrough



#### EN 374

Protect against hazardous micro-organisms



### Intermediate – Thermal Hazards

#### EN 511

Suitable for cold working hazards. Performance is scored 0-4, the higher the number, the more protective the gloves afford:



Letter Code	Level	Type
A	0-4	Convective cold-resistance
B	0-4	Contact cold-resistance
C	0-1	Water permeability
X		Test is non-applicable or unsuccessfully completed

#### EN 407

Protects against heat and fire from direct contact, radiation, conduction and/or open flames.

Letter codings signifying the type of protection delivered:



Letter Code	Type
A	Burning behaviour
B	Contact heat-resistance
C	Conductive heat-resistance
D	Radiant heat-resistance
E	Resistance to small drops of molten metal
F	Resistance to large quantities of molten metal
X	Test is non-applicable or unsuccessfully completed

Performance is also rated 0-4, the higher the figure, the better the protection:

Performance Level	Contact Temp. °C	Threshold Time Seconds
1	100	> 15
2	250	> 15
3	350	> 15
4	350	> 15

### Complex – Specialist gloves:

#### EN 659

Fire: specialist gloves for fire fighters. Protects against heat and flames. Also mechanical and chemical hazards so fit-for-purpose in a wide range of emergency scenarios.



#### EN 421

Radioactive: specialist gloves protecting against ionising radiation and radioactive contamination. The inclusion of lead in the manufacturing process supports protective standards for alpha-, beta-, gamma- and X-rays and neutron radiations as well as those handling radioactive materials in the workplace.



#### EN 60903

Electricity: specialist electricians' gloves. Insulating material protects wearers handling live wires. There are six glove types in this category, all tested against different voltages in the workplace:



Glove Class	Voltage
00	500
0	1000
1	7500
2	17000
3	26500
4	36000

### BOC

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