

The Glove Line: Guidelines, standards and laws



In Europe, the requirements for personal safety apparatus (PSA) and its use are regulated by the imposed European Directive 89/686/EEC and further put in concrete terms through numerous standards and laws. To comply with the various requirements of PSAs in the commercial sector, risks are divided into three categories:

Category 1 – minimal risk (Cat I)

Simple PSA, the gloves must conform to the basic requirements of EN 420 and only have to carry the CE mark. A prototype test is not required, as a declaration of conformity is sufficient.

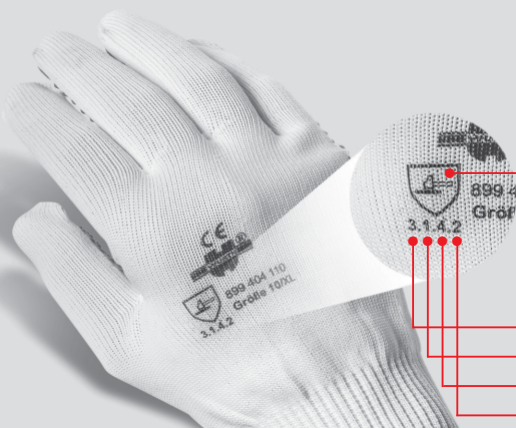
Category 2 – medium risk (Cat II)

A prototype test is also required here. This standard covers gloves of EN 388, protection against mechanical hazards, for example.

Category 3 – high risk (Cat III)

In addition to the prototype test, quality monitoring in accordance with ISO is also required here. This covers all PSA, e.g. fire brigade or chemical safety gloves which, if they fail, will cause serious injury to the wearer (danger to life and limb).

To make things easier for the wearer, pictograms have been introduced that show the safety functions fulfilled by the gloves.



EN 420: General requirements for gloves

EN 420 specifies the relevant test methods to be used for all protective gloves and the general requirements on basic design, glove manufacture, resistance of the glove material to penetration by water, harmlessness of the materials used, comfort and capability, identifying markings to be made by the manufacturer and the information to be supplied by the manufacturer.

EN 374: Protection against microorganisms

Test criteria	Assessment gauge
Liquid test	passed/failed

EN 374: Protection against chemical dangers

Test criteria	Assessment gauge
Penetration test	passed/failed
Permeation test	Break-through time

EN 388: Mechanical risks

Test criteria	Assessment gauge
Wear resistance	0 - 4
Cutting resistance	0 - 5
Tear resistance	0 - 4
Penetration resistance	0 - 4

EN 388: Protection against static electricity

(pursuant to EN 1149-1)	
Test criteria	Assessment gauge
Anti-static properties	passed/failed

EN 407: Protection against thermal risks

Test criteria	Assessment gauge
Burning behaviour	0 - 4
Contact heat	0 - 4
Convective heat	0 - 3
Radiated heat	0 - 4
Exposure to small particles of sprayed melted metal	0 - 4
Exposure to large quantities of liquid metal	0 - 4

EN 511: Protection against danger from cold

Test criteria	Assessment gauge
Convective cold	0 - 4
Contact cold	0 - 4
Water-tightness	0 - 1

Note:

0 = minimum requirement
4 - 5 = highest level

EN 388: Mechanical risks

Test criteria	Assessment gauge
Wear resistance	0 - 4
Cutting resistance	0 - 5
Tear resistance	0 - 4
Penetration resistance	0 - 4