Protective gloves against cold

Reference number: EN 511: 1994

Status: European Standard

Scope: This standard specifies the characteristics and test methods for protective gloves against cold transmitted by convection or conduction to a temperature of -50°C.

CONTENT

General requirements:

The protective gloves have to comply with the general requirements for protective gloves EN 420 with respect to size designation and pH.

Mechanical requirements

Abrasion resistance and tear strength resistance shall meet at least level 1 of EN 388

Specific requirements:

- The coating of the glove shall withstand repeated flexing (ISO 7854:1984) (no bursts after 1000 cycles)
- If required the glove shall be impermeable to water for >30 minutes (test method for leather shoes)
- The cold resistance (ISO 4675:1990) at a temperature of -50°C. No bursts at the location of the folds.
- Convective cold: The thermal isolation is measured with a heated artificial hand. The heat loss is used as a measure for the thermal insulation of the glove.

- Level of performance thermal insulation (m^2 .°C / W)

  - $0.10 \leq I_{tr} \leq 0.15$
  - $0.15 \leq I_{tr} \leq 0.22$
  - $0.22 \leq I_{tr} \leq 0.30$
  - $0.30 \leq I_{tr}$

- Conductive cold (contact) (ISO 5085-1:1989) : the resistance to heat loss (in m^2. C° / W) at a specified pressure (6.9 kPa) is used as a measure for the insulation against conductive cold.
  Four levels of performance are defined.

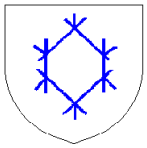
- Level of performance thermal resistance (m^2. °C / W)

  - $0.025 \leq R \leq 0.050$
  - $0.050 \leq R \leq 0.100$
  - $0.100 \leq R \leq 0.150$
  - $0.150 \leq R$

Marking :

According to EN 420 – See pictogram

Pictogram:



Information for the user:

According to EN 420