## A GUIDE TO THE EN REGULATIONS #ProtectYourMoneyMakers

## Four Reasons to Motivate Hand Protection

1. The hand is the second most common body part to be injured at work.

2. You're most at risk for cuts and lacerations with this being roughly 30% of all workplace injuries.

3. The solution is simple, create a barrier between your hands and whatever the work is your doing.

4. Injuries can be costly if you need to take time off work due to them.



EN420 Protective Gloves Standard Requirement

This standard defines the general requirements valid for all protective gloves. The standard is put in place to ensure the gloves themselves do not impose a risk or cause injury to the user.

This covers specific areas such as:

- The pH of the gloves should be as close as possible to neutral.
- Leather gloves should have a pH value between 3.5 9.5.
- The highest permitted value for chromium is 3 mg/kg (chrome VI).

All Fabric dyes should be free from harmful chemicals and substances know to irritate or cause harm to the skin.

 Specific details of any substance used in the glove which is known to cause allergies.

 Sized by reference to an agreed common European hand size, for example minimum/maximum length.



(scored levels 0-4, 4 being the highest level of protection)



The European Standard EN388 regulate the test requirements for safety gloves that are used for protection against mechanical risk. It is generally accepted that the majority of occupational hand injuries are caused by cuts and abrasions.

This consists of four compulsory tests along with two additional optional tests covering the following:

Compulsary tests:

1. Abrasion resistance

2. Blade cut resistance (Coupe test – Circular blade)

- 3. Tear resistance
- 4. Puncture resistance

Optional tests:

1. TDM Cut Resistance (Straight blade) - Scored levels A-F, F being the highest) 2. Impact resistance (back of hand test only) – Scored with either 'P' for pass or 'P' for fail

All of our gloves are now EN388:2016 rated so you can use this information to determine which glove is the best for you.

EN407 is recognized as an international standard for how well gloves protect from heat and/or flame, risk against thermal hazards.

The standard covers the following six tests:

- 1. Burning behaviour
- 2. Contact heat
- 3. Convective heat
- 4. Radiant heat
- 5. Small splashes of molten metal
- 6. Large splashes of molten metal

While not all tests may be relevant to the intended application, EN407 is designed to cover all thermal risks from a broad range of industries and applications.

As this is a European standard the results of the tests are presented in degrees Celsius.

We only test our Phoenix gloves for contact heat as the other tests aren't appropriate for the applications these gloves are used for.

## CONTACT HEAT

The glove is exposed to temperatures between  $100^{\circ}C$  to  $500^{\circ}C$ . It is then measured how long it takes for the inner side of the glove to become  $10^{\circ}C$  warmer than it was from the beginning (about 25 ° C degrees). The glove must withstand the increasing temperature of maximum  $10^{\circ}C$  for at least 15 seconds for an approval.







EN511 is a European standard designed to certify a gloves performance when it comes to resistance against cold.

Cold can be a hazard to the hands when working in situations such as extreme weather conditions or cold stores. In some cases, such environments can put individuals at risk of injuries such as cold burns or frostbite.

The standard is made up of three tests with the first two being Convective and Contact cold.These are scored 0-4, 4 being the highest level. The test Permeability of water is scored either '0' for a fail or '1' for a pass.

The standard covers the following three tests:

- 1. Convective Cold Resistance
- 2. Contact Cold Resistance
- 3. Permeability to Water

