

## 5 THINGS YOU SHOULDN'T FORGET WHEN SELECTING CHEMICAL PROTECTIVE GLOVES

Selecting the correct chemical protective gloves can be a pretty daunting task. Whilst it's obvious there is never going to be a 'one-size-fits-all' solution, the variety of options out there can be overwhelming. So where should you start? Identifying the right level of protection for the specific chemicals being used is clearly important, but here are five other (potentially less obvious) things to think about.

### 01 | TASK REQUIREMENTS: DEXTERITY

Before selecting any chemical protective gloves, it's important to ask 'what will the worker in question need to be able to do whilst wearing their gloves?'. A laboratory worker for example will need to be able to handle delicate glassware such as pipettes and beakers. These could be accidentally damaged or dropped if their gloves don't offer sufficient dexterity, putting the worker and their colleagues at risk of cuts or even splashes from the very chemicals you are trying to protect against. In this scenario therefore, choosing the thickest, re-usable glove with the highest breakthrough time may not necessarily be the best choice.

**SOLUTION:** Thin, disposable chemical-resistant gloves will normally offer high levels of dexterity while ensuring sufficient protection if the risk of contact is relatively low.

### 02 | TASK REQUIREMENTS: GRIP

Similarly, if climbing wet ladders or operating greasy machinery is what the worker needs to be able to do whilst wearing their gloves, they will need gloves with high levels of grip. Normally, the rougher the glove surface the better, but substances such as solvents may interact with the material and hamper its effectiveness.

**SOLUTION:** Select gloves that offer both suitable chemical protection AND grip, for example, a nitrile glove with a diamond or fishbone surface finish.

### 03 | ENVIRONMENTAL REQUIREMENTS: ATMOSPHERE

Think about where the worker is situated. For example, a spark is bad news for workers operating in highly explosive atmospheres, which is why every tool and piece of equipment they use, including gloves, should be antistatic. The level of danger increases if flammable substances are also involved.

**SOLUTION:** Materials such as butyl rubber combine protection against a wide range of chemicals and gases with antistatic properties.

### 04 | ENVIRONMENTAL REQUIREMENTS: TEMPERATURE

Did you know that ambient temperature can influence a glove's breakthrough time? Breakthrough times are determined through tests that are performed in laboratories with a constant 25°C temperature. Body and ambient temperatures, however, will inevitably affect these.

**SOLUTION:** Honeywell recommends allowing for a reduction in 'official' breakthrough times by 30 percent to provide a 'safety window'. It is also advisable to work with a supplier that is able to recommend gloves based on specific environmental scenarios.

### 05 | FIT REQUIREMENTS: VENTILATION

As well as having the correctly sized glove, ventilation is a key factor when it comes to worker comfort. If a worker has to wear gloves for prolonged periods of time, poor ventilation can cause their hands to sweat, which can be uncomfortable and encourage the worker to take their gloves off. A glove's cuff length will influence the amount of air inside the glove. Normally, the shorter the glove the better the ventilation.

**SOLUTION:** Unless full contact with chemicals is inevitable, shorter gloves may be the best option comfort wise. Alternatively, when long gloves are needed, it is important to look for models that allow good ventilation. A liner may also be advisable, particularly in hot environments, as it will help absorb sweat and so improve comfort.

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