Work Gloves & Chemical Products

English version

Occupational Risk Prevention For Workers

présanse
PRÉVENTION ET SANTÉ AU TRAVAIL
PROVENCE-ALPES-CÔTE D'AZUR-CORSE

CHOOSING THE RIGHT GLOVES: DISPOSABLE OR REUSABLE

Hands: valuable but fragile

- To protect yourself and limit risks, it is essential to use gloves that are suitable and resistant.
- For certain tasks, wearing protective sleeves may also be necessary.
- CE marking (Conformité Européenne – Compliance with Requirements) is mandatory.

Risks

Chemical products in contact with the skin can cause serious and irreversible damage:

- Redness, burns
- Cracks, chapping
- Eczema, hives
- Abrasion
- Skin cancer

Any exposure to chemical products involves a risk of penetration into the body through the skin. This chemical penetration can affect the liver, kidneys, nervous system, etc.

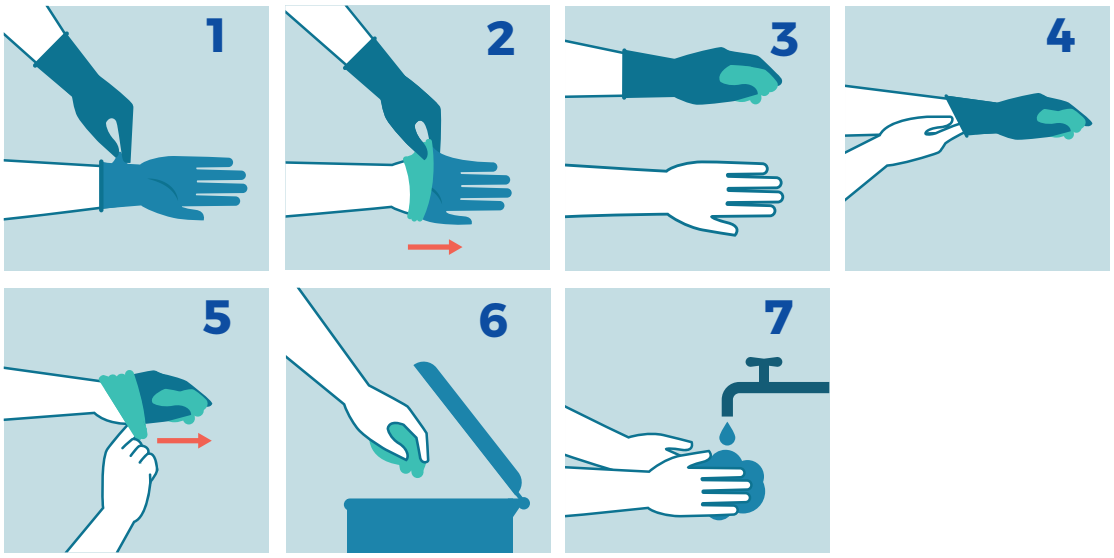
PRACTICAL ADVICE

Before starting a task, the worker should ask themselves:

- What risk am I exposed to?
- For how long?
- What are the constraints of the position (dexterity, sensitivity, temperature, etc.)?
- What glove size do I need?

They should also take time to read the glove information leaflet.

If the glove is contaminated, remove it as shown in the illustrations.



DIFFERENT MATERIALS

Choose the glove that best protects hands from identified hazards, and always read the manufacturer's safety data sheets.

Name	Material Type	Advantages	Inconvénients
Latex	**Natural or synthetic elastomer**	❖ Flexibility, durability, comfort, and good fit. ❖ Good grip. ❖ Resistance to cuts and punctures. ❖ Low cost. ❖ Very high elasticity. ❖ Available as disposable gloves.	❖ Risk of allergic reaction to natural rubber. ❖ Poor resistance to flames, hydrocarbons, and organic solvents.
Neoprene	**Synthetic elastomer (polychloroprene)**	❖ Good resistance to acids and bases. ❖ Good cut and abrasion resistance. ❖ High flame and heat resistance. ❖ Durable. ❖ Available as disposable gloves.	❖ Moderate chemical resistance (oils, petroleum). ❖ Moderate mechanical resistance. ❖ No resistance to aromatic or chlorinated solvents.
Nitrile	**Synthetic elastomer (acrylonitrile butadiene)**	❖ High elasticity. ❖ Resistant to cuts, punctures, and tears. ❖ High resistance to oils, fuels, and certain organic solvents. ❖ Available as disposable gloves.	❖ Low flame resistance. ❖ Reduced grip when wet. ❖ Poor resistance to ketones and halogenated products (e.g., chlorine, fluorine).
Butyl	**Synthetic elastomer (polyisoprene-isobutylene)**	❖ High resistance to oxidation and corrosive chemicals (oils and solvents). ❖ Low gas permeability. ❖ Good heat resistance. ❖ Good flexibility and resistance to tension and tearing.	❖ Poor resistance to hydrocarbons. ❖ High cost.
Polyurethane	**Thermoplastic or thermosetting synthetic polymer**	❖ Resistant to tension, punctures, abrasion, and tearing. ❖ Good resistance to certain organic solvents, oxidation, and oil.	❖ Poor heat resistance.
Multilayer materials	**Multilayer laminate**	❖ Excellent resistance to most chemicals.	❖ Poor dexterity. ❖ Low mechanical strength.
Fluorinated materials	**Synthetic materials (e.g., Viton®, Teflon®)**	❖ Good resistance to many substances including benzene and chlorinated chemical derivatives (PCBs), except ketones.	❖ Low resistance to cuts and abrasion. ❖ High cost.
PVC	**Polyvinyl chloride**	❖ Good resistance to acids, bases, alcohols. ❖ Moderate cost. ❖ Available as disposable gloves.	❖ Poor resistance to ketones, aldehydes, aromatic hydrocarbons.

Source : INRS

USAGE TIPS

- Don't share or borrow gloves: sharing gloves increases the risk of infection.
- Check for premature aging or wear.
- Put gloves on clean, dry hands.
- Change disposable gloves as soon as they contact chemicals.
- Avoid contact between gloves and other parts of the body: do not smoke, eat, or drink with gloves on, and do not wipe them on work clothes.
- Care: wash gloves according to the manufacturer's instructions—do not machine wash.
- Wash hands with soap and water after glove removal to avoid post-contact contamination.
- After use, dispose of gloves in containers appropriate for the associated risk.

Source : INRS

Gloves are not a miracle solution against hand injuries. They are just one element of a comprehensive prevention approach.

Golden rule: No material is permanently impermeable to chemical substances.

LEARN MORE

For any questions, contact your occupational physician or the multidisciplinary team of your Occupational Health and Prevention Service.

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