

Guideline for use of lab coat, clothing and shoes

General: lab coat and other protective clothing, shoes

Personal protective equipment must be used when a risk assessment and evaluation show that the risks of damage to health in the work situation cannot be avoided by other means.

What are the dangers

Hazardous substances, when they come into contact with the body, can cause damage. This concerns in particular the trunk, arms, legs and feet. This damage may be immediate or long-term.

Use a lab coat if:

there is a risk of contact with the body - torso, arms or legs - and damage may occur immediately or in the long term:

- while performing activities in the lab where (hazardous) substances or materials may end up on the body.
- in a lab environment with other staff working nearby with (hazardous) substances or materials that may end up on your own body.

Covering clothes and shoes:

In addition to a lab coat, clothes and footwear (shoes) covering legs and feet are always worn in a lab where hazardous substances are handled.

Examples:

Laboratories where hazardous substances are handled:

- **Chemical substances**
Substances that may be corrosive, toxic, sensitising, carcinogenic, mutagenic, reprotoxic, harmful to specific organs, flammable or oxidising (fire promoting).
- **Biological agents**
Genetically modified organisms (GMOs) and/or biological agents with the potential to cause disease or to transmit disease.

What lab coats and shoes have to comply with

- **General requirements Personal protective equipment** Regulation (EU) 2016/425
- **Protective clothing against chemicals:** NEN-EN 13034:2005+A1:2009¹
- **Shoes:** Standard closed shoes are sufficient.
Quality: Leather or synthetic material that does not 'melt away' on contact with chemicals.
Standard for safety shoes: Footwear protecting against chemicals: NEN-EN 13832-2, Part 2: Requirements for limited contact with chemicals²

¹ Protective clothing against liquid chemicals - Performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals

² NEN-EN 13832-2 specifies requirements for footwear to protect the user against limited contact in time with specific chemicals. The following risks are covered: splashing and degradation by chemical.

Other criteria and tips:

Lab coats in various designs:

- sturdy cotton approx. 300 g/m², suitable for chemical labs with hazardous substances:
 - may be toxic or corrosive to the skin or cause irritation or sensitisation. and/or
 - carcinogenic, mutagenic, reprotoxic (CMR) or harmful to specific organs.
- light cotton approx. 220 g/m², suitable for biochemical labs: non-aggressive chemicals
- blend of cotton and synthetic component, suitable for biochemical labs: non-aggressive chemicals

closure:

- closes at the front with (press) buttons; easy to pull out in case of incident
- high neck: compulsory for chemistry labs, chemistry practicals

Availability

Where there is or could be a risk to the safety or health of a worker at work, personal protective equipment shall be available in sufficient quantity for workers exposed or likely to be exposed to that risk.

Personal protective equipment is in principle intended for use by one person.

- For contained laboratories, lab coats and safety shoes must remain at the lab in question.
- For occasional use, lab coats and/or safety shoes are provided for guests. These are left behind in the lab after use. Please ensure that they are cleaned regularly.
- In contained spaces, colored lab coats should also be made available for cleaners who clean the rooms during the day.

Maintenance

Personal protective equipment shall be used and maintained in accordance with the instructions for use.

- There must be a **regular check** that the personal protective equipment is still in good condition according to the manufacturer's instructions.
- **Cleaning:**
 - FCO has outsourced the cleaning of lab coats to an external party. Requests for textile cleaning go through the FCO Service Desk: servicedesk.fco@vu.nl. The costs are passed on. Invoicing is done directly by the supplier, in accordance with the price agreements in the framework agreement.
 - Agreements are made by mutual agreement on the frequency, performance of the service and the location where the items are collected and delivered. This differs per building and per user. Users are responsible for depositing the items at the agreed collection locations and in accordance with the applicable guidelines and conditions.
- **Autoclave** prior to submission for cleaning. This applies to:
 - Lab coats of a contained laboratory (ML-II or higher)
 - Lab coats contaminated with GMO and/or biological material, e.g. due to an incident

Examples suppliers

Examples of suppliers of lab coats:

- De Berkel: Labjas [K-Lang 110402100 | De Berkel](#)
- Boom [Boomlab.nl | The #1 Laboratory Supplier since 1895](#)
- Vos [VOS Instruments | The Most Affordable Lab Supplier](#)
- Instrulabo: lab coat [Body protection | order body protection at Instrulabo | InstruLabo](#)
- VWR: website/.../workwear/lab coats
- Wemba home - Laundry and lab coats www.wasserij-wemba.nl