Occupational health and safety

Laboratory Safety

One day to work safely in a testing or analysis laboratory: reagents and chemicals, biological agents, gases, glassware, heating equipment and waste. The course starts from your safety data sheets, your methods and the layout of your benches, and ends with a laboratory inspection carried out by the participants.

Duration : 1 day

Objectives

1. Identify the hazards specific to the laboratory: chemical, biological, physical, and those linked to gases and equipment
2. Read a safety data sheet and derive the precautions for handling and storing reagents
3. Use fume cupboards, microbiological safety cabinets and protective equipment correctly
4. Manage laboratory waste, spills and emergencies: splash, cut, burn, inhalation
5. Inspect a laboratory and propose prevention actions

Programme

Day 1 — morning

• Laboratory accidents and exposures: lessons learned

• Chemical risk: labelling, SDS, incompatible reagents, preparing solutions, quantities at the bench

• Biological risk in microbiology: good practice, containment, decontamination

• Compressed and liquefied gases, heating equipment, centrifuges, autoclaves, glassware

Day 1 — afternoon (workshop)

• Collective protection: fume cupboards, microbiological safety cabinets, ventilation, and checking they work properly

• Personal protective equipment, safety showers and eye wash

• Waste: sorting, labelling, holding before collection; what to do in case of a spill

• Workshop: laboratory inspection by the participants, feedback and knowledge test

Teaching methods

• Work on your SDSs, your test methods and your records

• Laboratory inspection in sub-groups with an observation checklist

• Spill-handling exercise with the laboratory's absorbent kit

• Cases of published laboratory accidents

• Knowledge test

Assessment and documents

Knowledge test and feedback on the inspection carried out in the workshop, plus a day+1 learner feedback survey. Each participant receives a numbered training certificate, verifiable online; the laboratory receives the training report with the inspection findings.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

For a laboratory pursuing accreditation, the course “ISO/IEC 17025:2017 — Laboratories” covers the requirements for competence and validity of results. Storing reagents in the warehouse falls under “Chemical Products: Storage”.

Practical information

Duration	1 day
Audience	Laboratory technicians and managers, analysts, microbiologists, cleaning and maintenance staff working in the laboratory
Prerequisites	No prerequisites
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Is the course suitable for an in-house factory laboratory?
Yes. It is intended for the quality control laboratories of food, chemical or pharmaceutical plants as well as for service testing laboratories. The content follows your activities: physico-chemistry, microbiology or both.

Is this training for ISO/IEC 17025:2017 accreditation?
No. ISO/IEC 17025:2017 deals with the laboratory’s competence and the validity of results. This day is about protecting people. The two complement each other: an accredited laboratory must also control its working conditions.

Can cleaning staff attend?
It is advisable. Cleaners and maintenance technicians work in the laboratory without knowing all its hazards; the rules that concern them are covered during the session.

What should we prepare before the session?
The list of the most-used reagents, a few SDSs and the laboratory plan. These documents are used for the exercises and to prepare the inspection checklist.