# Safety Guidelines

**Microbiological Safety Cabinets**



Office of Occupational Health and Safety, Animal Welfare and Environmental Protection

**University of Würzburg**

Last update:

Workplace/activity:

|  |
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|  **Scope** |
|  | Safe use of class II microbiological safety cabinets (MSCs).  |
|  Safety, health, and environmental risks |
|  biohatzard gelbes dreieck | **Exposure to biological agents.** |
| Safety practices |
|  | * MSCs do NOT provide protection from harmful gases or vapours.
* Use key switch to turn on cabinet; cabinet must be on at least 15 minutes before work begins. Do not begin work until lights indicate safe work mode.
* Avoid external draughts caused by opening doors, people entering room or walking past front of cabinet, etc. and keep windows and doors closed while work is ongoing.
* Avoid disruption of laminar airflow:
* avoid swift or vigorous arm movements,
* avoid placing larger pieces of equipment in cabinet; if their use cannot be avoided, do not block any air vents or grills,
* do not use Bunsen burners in cabinet; if an open flame is absolutely necessary for the work, use a burner that provides a flame only as long as a button is kept pressed.
* Load cabinet with only the items you need for the procedure. Do not place more materials or equipment in the cabinet than needed for the procedure.
* Always wear personal protective equipment: lab coat, disposable gloves, and goggles.
* Avoid aerosol generation.
* Always disinfect equipment and containers before removing them from cabinet.
* After completion of work in MSC and before you turn off the unit, put cover lids on open cultures and place infectious items and materials in sealed containers.
* Clean and disinfect cabinet surfaces after completion of work. When using flammable disinfectants (e.g. alcohols), always take appropriate measures to ensure that an explosive atmosphere is not allowed to form.
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| **What to do in the event of malfunction** |
|  | * When work is ongoing, always ensure green light indicates safe work mode and sash is at its proper position.
* Always react to alarms (e.g. airflow or filter replacement alarms).
* If the cabinet fails, immediately discontinue work.**Immediately notify supervisor and biosafety officer.**
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| **What to do after an accident** |
|  | * Seek help from first aiders.
* Immediately call **112** to alert emergency responders.
* Render first aid.
* Immediately report accident.
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| **Maintenance, waste disposal** |
|  | **Written approval must be obtained from head of lab, and the room disinfected, before any maintenance work is performed.** |

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Date Signature

June 2021