# Safety Guidelines

**Fume Hoods and Cupboards**

 **University of Würzburg**



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

 Last update:

 Workplace/activity:

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| **Scope** |
|  | Safe use of fume hoods and cupboards (DIN 12924-1, DIN EN 14175). |
| Safety, health, and environmental risks |
| L:\StabsstelleAU\Fischer\Ingrid\Betriebsanweisungen\Symbole\W03.WMFL:\StabsstelleAU\Fischer\Ingrid\Betriebsanweisungen\Symbole\W21.WMF | * Exposure to hazardous materials when front sash is open or if airflow is blocked with unnecessary materials or equipment, there is external air movement (draughts, turbulence in front of hood/cupboard), you are working with high heat loads in hood/cupboard.
* Explosions caused by the release of significant amounts of combustible/flammable gases, vapours, particulates/dust, or aerosols.
* Splash or projectile hazards when front sash is open.
* Personal injury hazards if cable snaps and front sash drops.
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| Safety practices |
| L:\StabsstelleAU\Fischer\Ingrid\Betriebsanweisungen\Symbole\M01.WMFL:\StabsstelleAU\Fischer\Ingrid\Betriebsanweisungen\Symbole\M06.WMF | * Before work begins and while work is ongoing, always ensure that fume hood/cupboard is functioning correctly, green light - exhaust airflow rate OK.
* Always wear personal protective equipment (lab coat, goggles, and protective gloves).
* Keep front sash closed; wherever reasonably practicable, position horizontal sliding sashes between operator and work in the hood/cupboard and slide sashes to minimise openings.
* Load hood/cupboard with only the items you need for the procedure.
* Do not place larger pieces of equipment in hood/cupboard.
* Avoid rapid movements in front of the hood/cupboard.
* Never lean into, or put your head inside, a fume hood/cupboard.
* Never allow larger amounts of substance (gases, vapours) to be released inside hood/cupboard; wherever possible and reasonably practicable, capture and remove emissions at the point of release.
* Never work with high heat loads in hood/cupboard (do not work with more than one Bunsen burner or more than one hot plate in a fume hood/cupboard). If you cannot avoid working with high heat loads, use a hood/cupboard specifically designed for high heat loads.
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| **What to do in the event of malfunction** |
|   | * If front sash is not moving smoothly or is otherwise broken, discontinue work and notify supervisor.
* When an audio (horn) or visual (red light) alarm goes off, calmly cease potentially unsafe activities and stop using the hood/cupboard immediately.

Explosion and hazardous material release hazards arising from low exhaust airflow.* If hood/cupboard is not functioning correctly, notify supervisor or Technical Maintenance Service Centre (phone: 31 84444).
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| **What to do after an accident** |
|  | * Seek help from first aider (name see ‘What to Do in the Event of an Accident’ poster).
* Treat minor injuries immediately.
* **Call 112 to alert emergency responders.**
* Report accident to supervisor.
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| **Maintenance** |
|  | * Fume hoods and cupboards are subject to regular annual inspection and maintenance. All repairs and maintenance work must be performed by qualified personnel.
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Date Signature

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| June 2021 |