



Laboratory Safety Fact Sheet: Chemical Fume Hood

The fact sheet below gives information on the use of chemical fume hoods in laboratory settings.

What is a Chemical Fume Hood?

A Chemical fume hood is a **primary engineering control** used in laboratories to protect personnel from exposure to **hazardous, toxic, or flammable chemicals**. Fume hoods work by drawing air away from the user and exhausting contaminated air out of the laboratory to reduce inhalation and contact risks.

Before Using a Fume Hood

- Ensure you are trained and understand how the fume hood operates.
- Know the hazards of the chemicals you will be using (review the Safety Data Sheet).
- Verify the fume hood is turned on and operating.
- Set the sash to the proper operating height of 18 inches or less, typically indicated by arrows or labels on the hood.
- Check the airflow indicator or gauge to confirm airflow is within the acceptable range.

Safe Work Practices

- Never place your head inside the hood opening.
- For vertical sashes: keep the sash below face level.
- For horizontal sashes: keep the sash positioned between you and the work area.
- Wear appropriate eye protection at all times.
- Keep airflow unobstructed—do not block baffles or exhaust slots.
- Elevate large equipment (e.g., centrifuges) at least 2 inches off the hood surface to allow proper airflow.
- Keep all materials at least 6 inches inside the hood from the sash opening.
- When not actively working, close the sash

Prohibited Practices

- Do not permanently store chemicals inside a fume hood.
- Do not use a hood that is not functioning properly.
- Do not rely on a fume hood for protection against spills or explosions – it is designed for vapor control only.

Equipment Malfunctions & Emergencies

- If a fume hood is not working properly:
 - Stop work immediately.
 - Close the sash.
 - Tag the hood out of service.
 - Notify your supervisor and EHS Lab Chem Safety.
- When working with highly hazardous chemicals, be familiar with your laboratory's emergency procedures.

Contact EHS:

For fume hood inspections, airflow concerns, training, or safety questions, contact fumehoodsafety@gatech.edu

EHS Emergency Number: 404-216-5237