



EHS Fact Sheet

Chemical Fume Hood

What is a Chemical Fume Hood?

- Fume hoods are often the primary control device for protecting laboratory workers when working with flammable and/or toxic chemicals. Proper usage can help prevent unnecessary laboratory accidents.
- OSHA's Laboratory standard (29 CFR 1910.1450) requires that fume hoods be maintained and function properly when used.



Before you operate a chemical fume hood, you should:

- Ensure that you are trained and understand how the hood works.
- Know the hazards of the chemical you are working with; refer to the chemical's Safety Data Sheet if you are unsure.
- Ensure that the hood is on.
- Ensure that the sash is open to the proper operating level, which is usually indicated by arrows on the frame.
- Use appropriate eye protection.

When using a fume hood:

- Never allow your head to enter the plane of the hood opening. For example, for vertical rising sashes, keep the sash below your face; for horizontal sliding sashes, keep the sash positioned in front of you and work around the side of the sash.
- Do not permanently store any chemicals inside of the fume hood.
- Ensure the airflow is not blocked through the baffles or through the baffle exhaust slots.
- Elevate large equipment (e.g., a centrifuge) at least two inches off the base of the hood interior.
- Keep all materials inside the hood at least six inches from the sash opening. When not working in the hood, close the sash.
- Avoid creating air currents or cross-drafts across the hood's open sash.
- Do not work in fume hood posted with an "OUT OF SERVICE" sign on the sash.

EHS personnel periodically conduct flow tests to determine proper air flow. The results of the flow tests are shown with a sticker on the sash indicating the air flow in feet per minute for the hood. Proper air flow should be between 80 and 120 feet per minute. Flow tests are conducted annually.