

Bunsen Burner Safety



Bunsen burners are essential tools in laboratories on campus for heat generation and sterilization purposes. However, they present fire hazards from high temperatures and open flames that can result in injuries or unintentional fires. For everyone's safety, please review and follow these guidelines when Bunsen burners are in use.

General Bunsen Burner Safety Considerations:

- Maintain the Bunsen burner at least 12 inches away from overhead shelving, equipment, or light fixtures when in use.
- Remove all combustible materials and chemicals from the immediate work area.
- Tie-back loose clothing, dangling jewelry, or long hair to avoid accidental ignition.
- Inspect the unit for any defects before operating the Bunsen burner. If a component is defective, replace it before using the burner.
- Ensure that others in the laboratory are aware that a Bunsen burner will be used.
- Always use a spark/igniter with an extended nozzle to light the burner. Do not use a match.
- Have an ignition source on hand before you turn the gas on.
- Once a burner is active, adjust the flame by turning the collar to regulate air flow.
- Never leave open flames unattended and never leave the laboratory while the burner is on.
- Shut off gas once the Bunsen burner is no longer in use.
- Ensure that the burner and any devices exposed to heat have cooled before handling.
- Verify that the gas valve has been closed securely before leaving the lab.

PPE Considerations:

Always wear PPE that's appropriate to the Bunsen burner you are using. Typically that means a lab coat, indirectly vented safety goggles, and chemical protective nitrile gloves. If you must handle hot items, use thermally protective gloves.



Other Emergency Considerations:

- In the event of a fire, immediately notify all personnel in the lab, shut off to the Bunsen burner (if possible), notify University Police by phone (845-257-2222) or by activating the nearest fire alarm pull station, and begin evacuation procedures.
- If you smell an appreciable gas odor, initiate an emergency evacuation and turn off the main gas valve to the lab.
- If you experience a minor, topical skin burn, cool the affected area under cold water for 15 minutes. There is not a need for creams or ointments – simply cover the burn with a band-aid once cooled.
- If the burn covers an area greater than 3 inches in width, seek medical attention.
- Be sure to report all injuries to the lab supervisor, no matter how minor.