

# Alternatives to Use of Flames Inside a Biosafety Cabinet

## I. Disadvantages of using Bunsen burners inside a biosafety cabinet (BSC):

- It requires the hook-up of a central gas source.
- A continuously burning flame disturbs the airflow in the BSC, causing potentially infectious air to escape the cabinet without HEPA filtration.
- The heat from the flame can damage the cabinet structure and the HEPA filter.
- Flammable chemicals used in the BSC are concentrated through recirculation of the air. Concentrated flammable chemicals can ignite with an open flame and explode within the cabinet.
- It voids manufacturer's warranties on the cabinet: cabinet manufacturers will assume no liability in the event of fire, explosion or worker exposure due to the use of a flammable gas in the cabinet. Additionally, the UL approval will automatically be void.

## II. Safety Sterilizers, Electric or Flame on Demand:

- Adjustable burning time
- Independent operation from gas supply
- Economical gas consumption
- Small footprint
- UV resistant
- Touch free flame start/stop
- Safety systems
- Simple operation

## III. Alternatives to Continuous Flame Bunsen Burners



Safety Lab Gas Burner



Bacticinerator



Touch-O-Matic



Glass Bead Sterilizer



Mini Propane Torch