



# SAFETY ALERT

## Chemical Fire

RISK MANAGEMENT & SAFETY

**Event:** Chemical Fire  
**Date:** September 2014  
**Category:** Fire/Chemical  
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### Description:

While flame sterilizing a lab tool, a fire resulted when a graduate student attempted to extinguish the flame on the alcohol burner by covering it with the burner's cap. Inadvertently, the graduate student grabbed the beaker with alcohol instead of the cap. The alcohol ignited and poured on the bench and into a nearby trash can. The student extinguished the fire with a CO<sub>2</sub> extinguisher.



### Findings:

- The student, new to the technique, was flame sterilizing the lab tool by dipping it into a beaker of alcohol and then putting it into the flame.
- The beaker was not labeled and was similar in size and shape to the alcohol burner cap.
- No PPE was worn during the procedure.
- The student received lab safety and fire extinguisher training and used a fire extinguisher to extinguish the fire.
- The University's emergency reporting process was followed by lab personnel.

### Root Causes:

- There was no procedure to distinguish between the beaker and the burner cap.
- The procedure to use the bench top trash container was not followed which added more fuel for the fire.

### Recommended Actions:

- Develop written procedures regarding the use of bench top trash cans, and distinguishing the beaker from burner cap.
- Require the use of appropriate PPE while conducting flame sterilization.
- Train lab personnel on new/modified procedures.