

# HAZARD ALERT

## Explosion and Glassware Failure

There was an incident in the department in which a liquid-nitrogen-cooled solvent trap exploded immediately after the vacuum was turned off and the Dewar was lowered.

The researchers and incident investigators believe that the explosion resulted from a crack in the glassware that resulted in air entering the trap and oxygen condensing in the trap. See photo of apparatus below. It is possible that the metal prongs of the clamps scored the glass which led to the failure.



### Recommendations:

- Ensure clamps have a plastic coating on the prongs.
- Inspect glassware for cracks.
- Position a blast shield in front of the trap.

### Recommended resource:

<https://schlenklinesurvivalguide.com/schlenk-line-safety/>