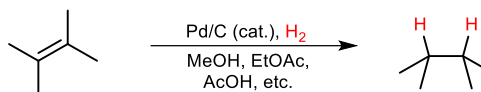


## Hazards

- All operations must be performed in a fume hood
- Pd/C is flammable, and hydrogenations often use flammable solvents!
- Avoid exposing Pd/C catalyst to both oxygen and hydrogen gases simultaneously!



## Standard Operating Procedure

1. Remove flammable solvents (open containers, column fractions) from workspace
2. Add catalyst to flask, place under nitrogen atmosphere
3. Add solvent, followed by substrate
4. Degas solution by sparging with N<sub>2</sub> for 10 minutes
5. Sparge with H<sub>2</sub> for 10 minutes, then let stir with H<sub>2</sub> balloon until completion

## Workup and Disposal

1. Filter reaction mixture through Celite to remove Pd/C
2. Rinse Celite pad with generous methanol, be sure not to let the catalyst dry out!
3. Place used catalyst in appropriate waste ("Pd/C waste"), Celite and all. Do NOT dispose of in regular solid waste!

For additional safety information and best practices, see:

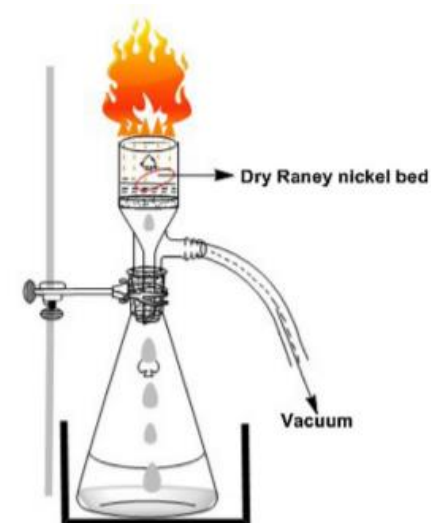


Figure 14. Catalyst fire during filtration.