



- Ensure all glassware is free of moisture and oxygen. Dry glassware in an oven, transfer it to a desiccator to cool, then assemble glassware in the fume hood and purge with inert gas.
- Transfer pyrophoric liquids following manufacturer's recommendations, the Aldrich Technical Information Bulletin No AL-134, the technique outlined by Schwindeman et al. (2002), or your laboratory-specific procedure.
- Transfer pyrophoric solids (e.g., finely-divided metals) in a dry, inert atmosphere in a glovebox.
- Dispersions of pyrophoric solid in mineral oil (e.g., potassium hydride or sodium hydride) can be weighed as follows:<sup>2</sup>
  - o Weigh out required amount of dispersion and seal in a flask under nitrogen.
  - o Add dry hexanes via syringe, swirl and let solids settle.
  - o Slowly syringe off hexanes.
  - o Carefully discard into a separate flask containing isopropanol.
  - o Repeat rinse



- After rinsing, leave the container open in the back of a fume hood for at least one week before disposal. Deface the label.
- Never leave a container with residue of pyrophoric material open to the atmosphere.
- All materials (e.g., disposable gloves, bench paper) that contain or are contaminated with pyrophoric materials must be decontaminated and disposed as hazardous waste.
- Submit a request through the online system for hazardous waste pickup.

## **Emergency procedures**

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## References

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- UCLA Chemistry & Biochemistry, Procedures for Safe Use of Pyrophoric solids (2/2009) https://www.chemistry.ucla.edu/sites/default/files/safety/sop/SOP\_Pyrophoric.pdf (accessed June 6 2019).
- 3. AL-134 Handling air sensitive reagents. (1997) https://www.sigmaaldrich.com/content/dam/ sigma-aldrich/docs/Aldrich/Bulletin/al\_techbull\_al134.pdf (accessed June 6 2019).
- 4. National Research Council (U.S.). (2011). *Prudent practices in the laboratory: Handling and management of chemical hazards.* Washington, D.C: National Academies Press.
- 5. Bowen, J. E. (2019, September 3). *Metal fires require knowledge of proper extinguishing agents*. Fire Engineering. https://www.fireengineering.com/leadership/metal-fires-require-knowledge-of-proper-extinguishing-agents/.