

## Recommended Drying Methods

Solvent	Dessicant and Procedure
Acetone	Quick: treatment with 3 sequential batches of activated 4Å mol sieves. More effective: Distillation from BaO onto activated 4Å mol sieves.
Benzene	THF/benzophenone ketyl
Toluene	THF/benzophenone ketyl
THF	Pre-dry over 3Å, 4Å, or 5Å mol sieves, followed by distillation from THF/benzophenone ketyl
Diethyl ether	Reflux ( $\geq 3$ h) and distillation from LiAlH <sub>4</sub> or THF/benzophenone ketyl
Methylene chloride, 1,2-dichloroethane, chloroform, chloroform-d, carbon tetrachloride	Reflux ( $\geq 3$ h) and distillation from P <sub>4</sub> O <sub>10</sub> taking care to avoid contamination of the solvent with sublimed drying agent. Also, drying over several batches of activated molecular sieves works very well.
Pentane and Hexane	Wash with small amounts of concentrated nitric acid until washings do not turn yellow (to eliminate olefins and aromatics); dry with a bulk drying agent (such as CaSO <sub>4</sub> ); reflux and distillation from Na/benzophenone ketyl plus added tetraglyme (ca. 1 mL per liter of pentane)
Acetonitrile	Purchase dry solvent from Aldrich; for very dry material, reflux ( $\geq 12$ h) and distill over CaH <sub>2</sub> .
Methanol	Reflux ( $\geq 6$ h) and distill from Mg(OMe) <sub>2</sub> , prepared from Mg turnings in MeOH with I <sub>2</sub> initiator. See procedure in "Chemist's Companion"
Dimethoxyethane (dme)	THF/benzophenone ketyl