

LDA Titration

Weigh ~0.4g of diphenylacetic acid into a 5 mL volumetric flask. Make up rest of volume with THF (no stir bar).

Weigh ~0.04g LDA in 5 mL Kimble vial with stir bar. Add 1 mL of THF to each vial. Add stock solution of DPAA until the color changes from yellow to white (ppt).

Calculations:

$\text{g LDA} / 107.12 \text{ g/mol LDA} = \text{mol LDA if 100\% pure}$

$\text{g DPAA} / 212.25 \text{ g/mol DPAA} / 0.005\text{L} = \text{M DPAA stock solution}$

$\text{M DPAA stock solution} \times \text{L used for titration} = \text{actual mol LDA in vial}$

$\text{actual mol} / \text{theoretical mol} \times 100 = \% \text{ purity of LDA}$