

## Synthesis of ephedrine/pseudoephedrine

### Synthesis of Ephedrine

Ephedrine was synthesised using the procedure described by Painter and Pigou [7] with minor modifications.

A mixture of N-methylalanine (1 g) and benzaldehyde (1.2 mL) in DMSO was stirred and heated at 130°C for 1 hour. Acetic acid solution (5%, 10.3 mL) was added to the reaction mixture and refluxed. After 4 hours the mixture was allowed to cool. DCM (50 mL) was added to the mixture and extracted with 3 x 50 mL of H<sub>2</sub>O. The pH of the aqueous phase was adjusted to 10 with 10% NaOH (aq) and extracted with 3 x 60 mL of DCM. The combined DCM extracts were dried over anhydrous sodium sulfate and evaporated to dryness under reduced pressure yielding ephedrine/pseudoephedrine (0.79 g) as a white, waxy solid.