

Procedure 2:

A solution of 2-methylindoline sodium (1.566 g, 0.0117 mol) in 40 ml tetrahydrofuran was refluxed up to 60-65 C⁰. 3-bromoprop-1-yne (3 g, 0.025 mol) was added to the solution for 30 minutes as (1 ml every 10 minutes).

The mixture was stirred for 70 minutes and filtered to give brown solution (10ml).

The solvent was fractionated between chloroform and water, the chloroform layer was separated, dried with Magnesium sulphate anhydrous and filtered. The solvent was removed under reduced pressure to afford the desired brown crystals, recrystallization from diethylether to afford compound (1.6 g, 93%), and showed similar IR, ¹H-NMR and Analytical calculations.

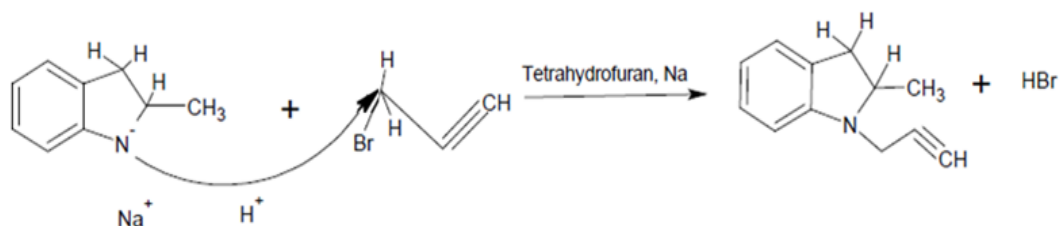


Figure 20: Synthesis of 2-methyl-1-(prop-2-yn-1-yl)-2,3-dihydro-1H-indole by Sodium in tetrahydrofuran.