Abstract:

Disclosed herein is an improved process for the preparation of 2,2' dichloroazoxy benzene, which comprises conversion of o-nitrochlorobenzene to 2,2'dichloroazoxy benzene in presence of formaldehyde, caustic lye solution, Diclone catalyst and Dinol-25, a dispersing agent; further, hydrogenating 2,2'dichloroazoxy benzene in presence of caustic lye solution and activated Raney Nickel catalyst in DMF under inert conditions to get 2,2' dichlorohydrazobenzene; followed by its rearrangement into 3,3' dichlorobenzidine dihydrochloride. The 2,2' dichlorohydrazobenzene is treated with sulfuric acid to obtain 3,3' dichlorobenzidine sulfate, followed by precipitating 3,3' dichlorobenzidine dihydrochloride by treating it with NaCl solution.