Imines in reactions with 1,3-dioxolane

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Abstract

Interaction of 1,3-dioxolane with N-benzylidene-4-nitroaniline in the presence of zinc chloride and concentrated hydrochloric acid is accompanied by the formation of N-benzyl-4-nitroaniline. However, 1,3-dioxolane is a condensing agent for para-substituted N-arylmethyleneanilines in a medium of trifluoroacetic acid and benzene. Reaction of the said compounds results in the formation of 4,4′-bis(arylmethyleneamino)diphenylmethanes.