

1,ω-Bis(4-amino-1,2,4-triazole-5(1H)-thion-3-ylsulfanyl)alkanes: Versatile precursors for novel bis(S-triazolo[3,4- b][1,3,4]thiadiazines) as well as novel bis(macrocylic schiff bases)

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Abstract

Two synthetic routes were attempted for the synthesis of the novel bis(5,6-dihydro-S-triazolo[3,4-b]thiadiazines) 12a,b and 14. In the first route the bis(aminotriazoles) 4a,b were reacted with the appropriate -haloketones or -haloesters to give the corresponding bis(S-triazolo[3,4-b]thiadiazines) 11a-d followed by reduction with NaBH₄. In the second route, the bis(Schiff bases) 13d were reacted with the appropriate -haloesters in refluxing DMF containing TEA to give the target compound 14. Cyclocondensation of 4a,b with the appropriate bis(carbonyl) ethers 15a,b in refluxing acetic acid under high dilution conditions afforded the corresponding macrocyclic Schiff bases 16a-c. The latter underwent alkylation with the appropriate halo compounds to give the corresponding alkylated derivatives 17a-d.

Keywords: DMF, Cyclocondensation, underwent alkylation.

Published In: Journal of Heterocyclic Chemistry, vol. 42, issue 2, pp. 233–241, 2005.