

Efficient, eco-Friendly and Regioselective Method for Thiolytic of 1,2-Epoxides with Diaryl Disulfides in the Presence of Zn/Bi(TFA)₃-TBPB or Zn/Bi(OTf)₃-TBPB

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Diaryl disulfides undergo regioselective ring-opening of 1,2-epoxides in the presence of zinc powder and 3-4 mol-% of bismuth(III) trifluoroacetate or 1 mol-% of bismuth(III) triflate in molten tetrabutylphosphonium bromide (TBPB) to afford the corresponding β -hydroxy thioethers in good to excellent yields.

Key words: Epoxide, Diaryl Disulfide, Thiolytic, Ionic Liquid, Bismuth(III) Compounds