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Telescoped Synthesis of *N*-Substituted 8*H*-Indeno[1,2-*d*]thiazol-2-amine Promoted by Tribromoisocyanuric Acid

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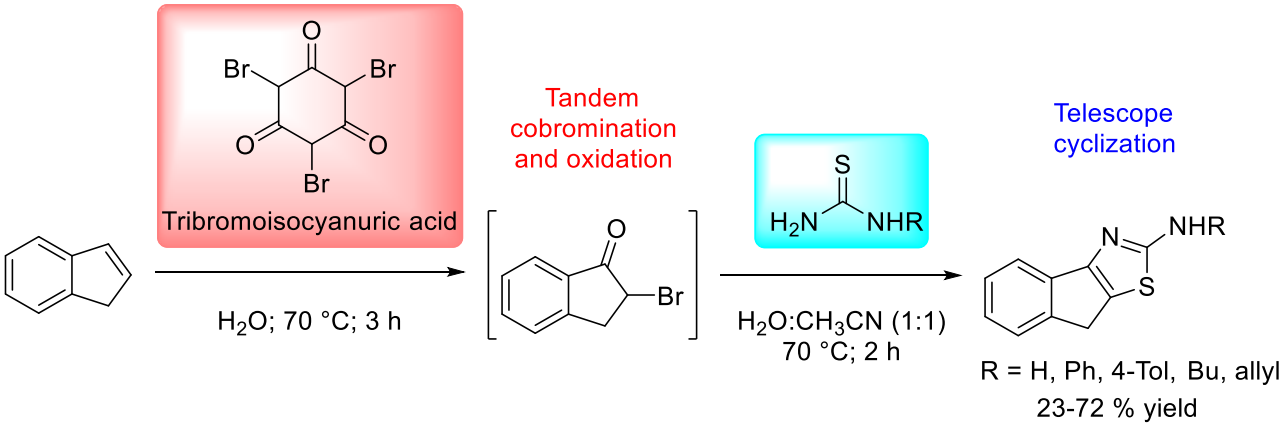
ABSTRACT

2-Aminothiazole compounds are notoriously important due to its applications in medicinal chemistry and photochemistry. Among the framework diversification employed, ring fused thiazoles, particularly indeno fused, demonstrated beneficial gain on biological properties such as tumor growth inhibition[1] and as adenosine receptor ligand.[2]
8*H*-Indeno[1,2-*d*]thiazol-2-amine derivatives are usually synthesized *via* Hantzch reaction of *α*-haloindanone with mono-substituted thioureas. To avoid manipulation of the hazardous *α*-haloketone, commonly it is generated *in situ* by reacting indene or 1-indanone with *N*-haloimides.[3,4] Among the *N*-haloimides, trihaloisocyanuric acids present higher atom economy and are comparatively an ease of access reagent.
In this work we explore tribromoisocyanuric acid for the tandem halogenation/oxidation reaction with indene thus forming 2-bromoindanone which enabled us to telescope synthesize 2-aminothiazoles directly by the addition of the selected thioureas.



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