عنوان مقاله:

Ammonium salts as economical and eco-friendly N-sources applied to green, simple and scale-up synthesis of trialkyl amines in water

محل انتشار:

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خلاصه مقاله:

We have introduced a selective synthesis of tertiary amines using alkyl halide and ammonium salts as the amine sources in water. This green process has outstanding superiorities, such as being eco-friendly, possessing ammonium salts, and using water as a green solvent in the absence of organic ligands or catalysts. It is worth mentioning that the presence of t-Butyl alcohol and potassium hydroxide leads to synthesize tertiary amines, while under other conditions we witnessed the formation of byproducts. Other factors affecting the synthesis of various tertiary amines are temperature ranges. Note that various tertiary amines and the process of scale-up were synthesized in moderate to high yields.

کلمات کلیدی:

N-alkylation, tertiary amine, ammonium salts, t-Butyl alcohol, Potassium hydroxide