

عنوان مقاله:

Phase transfer catalyzed reaction of disodium salt of 1,3-dihydroxybenzene with propargyl bromide in solid-liquid biphasic condition

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خلاصه مقاله:

The present work describes, the reaction between disodium salt of 1,3-dihydroxybenzene (in situ formation) and propargyl bromide was carried out in a solid-liquid biphasic phase transfer catalytic system at 50°C. Higher selectivity of the bis-derivative (1,3-bis(prop-2-ynyloxy)benzene) was obtained under solid-liquid PTC condition. The conversion of propargyl bromide of more than 99% was achieved in the presence of tetra-n-butylammonium bromide (TBAB) as catalyst. From the experimental evidence there is no mono-derivative observed. Experiments were conducted to increase the conversion of propargyl bromide such as, stirring speed, various PTCs, temperature, various solvents and amount of TBAB loading. All the experiments were conducted to obey pseudo-first order rate law. Apparent activation energy was also determined from the Arrhenius plot.

کلمات کلیدی:

Phase transfer catalyst, 1,3-dihydroxybenzene, 1,3-bis(prop-2-ynyloxy)benzene, solid-liquid reaction

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