

Copper(II)-catalysed oxidative carbonylation of aminols and amines in water: a direct access to oxazolidinones, ureas and carbamates.

Autorzy

Michael Casiello
Francesco Iannone
Pietro Cotugno
Antonio Monopoli
Nicola Cioffi
Francesco Ciminale
Anna M. Trzeciak
Angelo Nacci

Rok wydania

2015

Czasopismo

Journal of Molecular
Catalysis A-Chemical

Numer woluminu

407

Strony

8-14

DOI

10.1016/j.molcata.2015.06.007

Kolekcja

Naukowa

Język

Angielski

Streszczenie

Copper(II) chloride catalyses the oxidative carbonylation of aminols, amine and alcohols to give 2-oxazolidinones, ureas and carbamates. Reaction proceeds smoothly in water under homogeneous conditions ($P_{\text{tot}} = 4 \text{ MPa}$; $P_{\text{O}_2} = 0.6 \text{ MPa}$, P_{CO}), at $100 \text{ }^\circ\text{C}$ in relatively short reaction times (4 h) and without using bases or any other additives. This methodology represents an economic and environmentally benign non-phosgene alternative for the preparation of these three important N-containing carbonyl compounds.

Słowa kluczowe

oxidative carbonylation, copper halides, 2-oxazolidinones, carbamates, ureas

Adres publiczny

<http://dx.doi.org/10.1016/j.molcata.2015.06.007>

Strona internetowa wydawcy

<http://www.elsevier.com>

Artykuł

Plik został wygenerowany dnia 2026-08-19 09:19:45

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/3ygE1Xe>.