

Materials List for:

A Microwave-Assisted Direct Heteroarylation of Ketones Using Transition Metal Catalysis

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Materials

Name	Company	Catalog Number	Comments
Chloroform-d (99.8+% atome D)	Acros Organics	AC209561000	contains 0.03 v/v% TMS
CombiFlash Rf Flash Chromatography system	Teledyne Isco		automated flash chromatography system
CombiFlash Solid load catridges (5 gram)	Teledyne Isco	69-3873-235	disposable
CombiFlash prepacked column (4g)	Teledyne Isco	69-2203-304	RediSep Rf silica 40-60 um, disposable
Microwave Reactor - Multiwave Pro	Anton Paar	108041	Microwave Reactor
Microwave Reactor Rotor 4X24 MG5	Anton Paar	79114	for parallel organic synthesis with with 4 SiC Well Plate 24
Microwave reaction vials	Wheaton® glass	224882	disposable, 13-425, 15x46 mm, reaction solution 0.3 - 3.0 mL, working pressure 20 bar
Microwave reaction vial seals, set	Anton Paar	41186	made of Teflon; disposable
Microwave reaction vial screw cap	Anton Paar	41188	made of PEEK; forever reusable
Microwave reaction vial stirring bar	CTechGlass	S00001-0000	Magnetic, PTFE, Length 9mm. Diameter: 3mm. (Package of 5)
NaOtBu	Sigma-Aldrich	703788	stored in a glovebox under nitrogen atmosphere
Nuclear Magnetic Resonance Spectrometer	Joel		500 MHz spectrometer
Silica gel	Teledyne Isco	605394478	40-60 microns, 60 angstroms
Toluene	Sigma-Aldrich	244511	vigorously purged with argon for 2 h before use
XPhos Palladacycle Gen. 4 Catalyst	STREM	46-0327	stored in a glovebox under nitrogen atmosphere
various ketones	Sigma-Aldrich or Fisher or Ark Pharm.		substrates for heteroarylation
various heteroaryl halides	Sigma-Aldrich or Fisher or Ark Pharm.		substrates for heteroarylation