SciFinder® Page 1

1. Single Step

71%

Overview

Steps/Stages

1.1 R:H₂SO₄, S:H₂O, 5 min, rt \rightarrow 170°C; 25 min, 170-172°C

Notes

thermal, key intermediate, microwave irradiation (400W), Reactants: 1, Reagents: 1, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

References

Synthesis, structure elucidation, DNA-PK and PI3K and anti-cancer activity of 8- and 6-aryl-substituted-1-3-benzoxazines

By Morrison, Rick et al

From European Journal of Medicinal Chemistry, 110, 326-339; 2016

CASREACT ®: Copyright © 2016 American Chemical Society. All Rights Reserved. CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.

3. Single Step

100%

Overview

Steps/Stages Notes

SciFinder® Page 2

- 1.1 R:NaOH, S:H₂O, rt \rightarrow 120°C; 2 h, 120°C
- 1.2 R:HCl, S:H₂O, pH 1

alternative reaction conditions gave lower yield, Reactants: 1, Reagents: 2, Solvents: 1, Steps: 1, Stages: 2, Most stages in any one step: 2

References

Method for preparing dicamba

By Sun, Guoqing et al From Faming Zhuanli Shenqing, 102838483, 26 Dec 2012

CASREACT ®: Copyright © 2016 American Chemical Society. All Rights Reserved. CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.