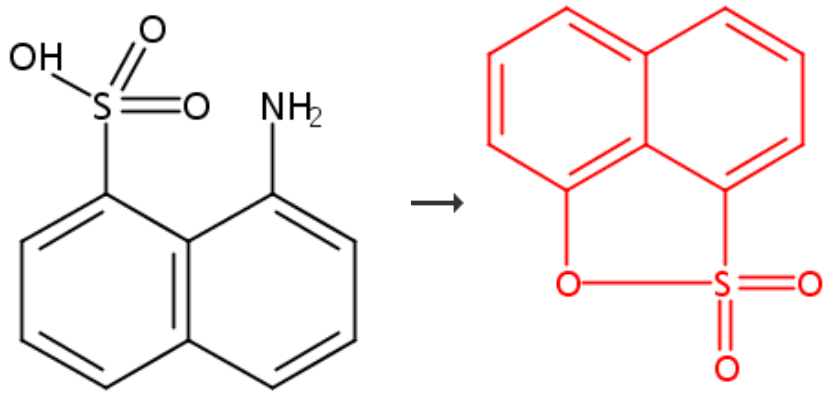
1. Single Step



92%

Overview

Steps/Stages

1.1 R:HCl, R:$NaNO_2$

Notes

Reactants: 1, Reagents: 2, Steps: 1, Stages: 1, Most stages in any one step: 1

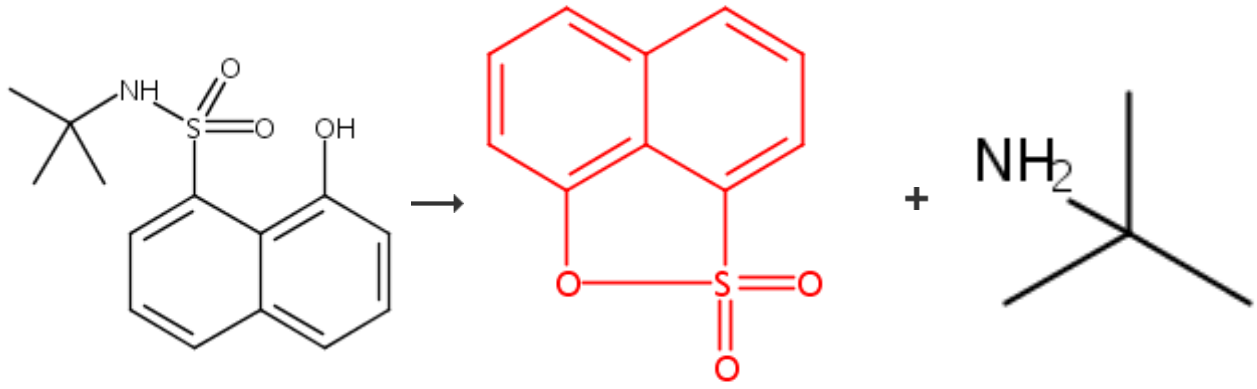
References

Approaches to anthracyclines: efficient syntheses of substituted naphthylacetonitriles

By Parker, Kathlyn A. and Iqbal, Tahir

From Journal of Organic Chemistry, 45(6), 1149-51; 1980

2. Single Step



6%

Overview

Steps/Stages

Notes

1.1 R:NaOH

combined yield, 15.7%, selectivity (85%), Reactants: 1, Reagents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

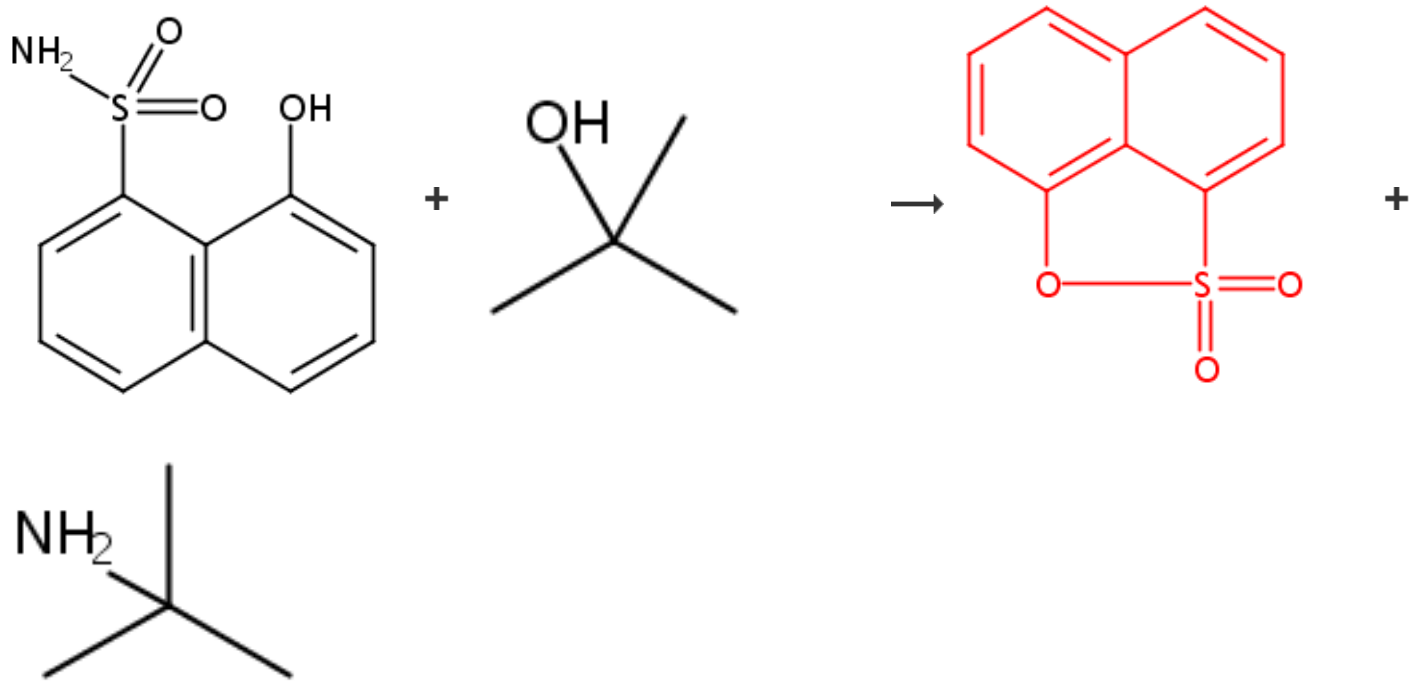
References

Efficient C-N formation for preparing α-branched primary amines by recycled intramolecular reactions of 1,8-naphthosultone using ammonia as nitrogen source

By Zhou, Xinrui et al

From Chinese Journal of Chemical Engineering, 22(4), 405-410; 2014

3. 2 Steps



Overview

Steps/Stages

1.1 C:1227872-65-2, 24 h, 70°C

2.1 R:NaOH

Notes

2) combined yield, 15.7%, selectivity (85%), Reactants: 2, Reagents: 1, Catalysts: 1, Steps: 2, Stages: 2, Most stages in any one step: 1

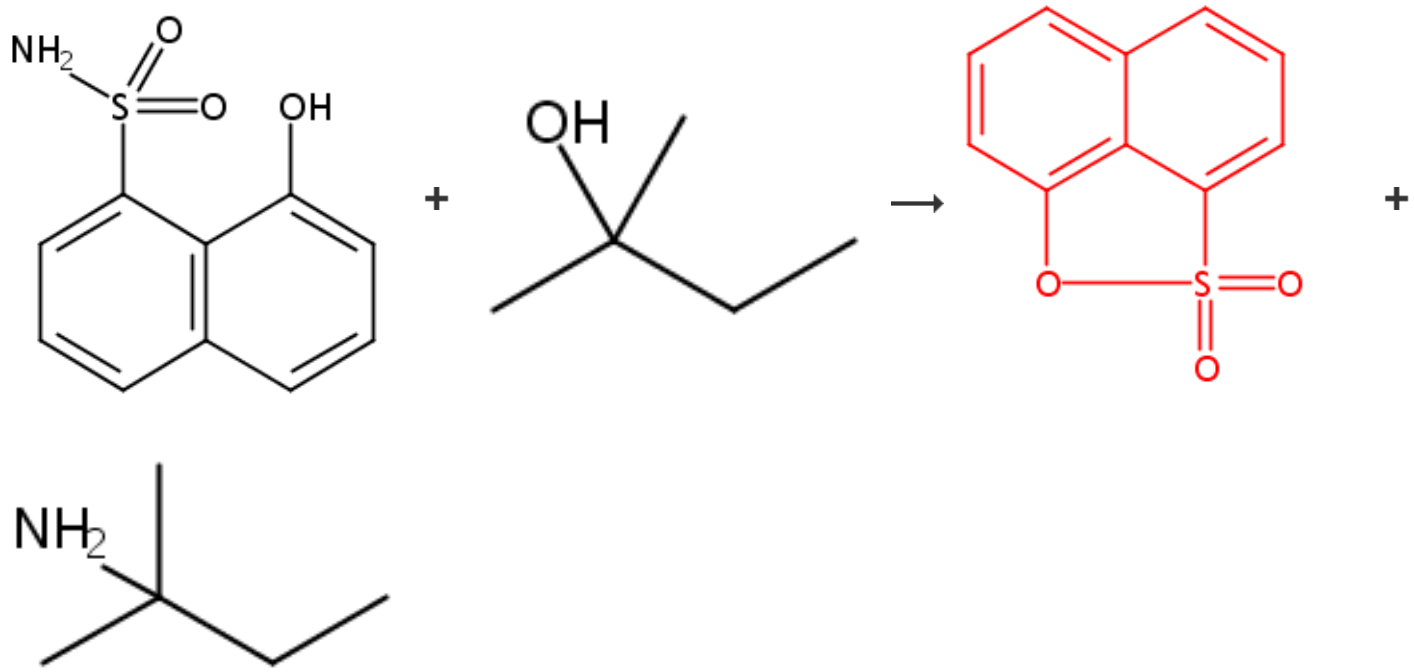
References

Efficient C-N formation for preparing α-branched primary amines by recycled intramolecular reactions of 1,8-naphthosultone using ammonia as nitrogen source

By Zhou, Xinrui et al

From Chinese Journal of Chemical Engineering, 22(4), 405-410; 2014

4. Single Step



Overview

Steps/Stages

1.1 C:1227872-65-2, 24 h, 70°C

1.2 R:NaOH

Notes

combined yield, 10.3%, Reactants: 2, Reagents: 1, Catalysts: 1, Steps: 1, Stages: 2, Most stages in any one step: 2

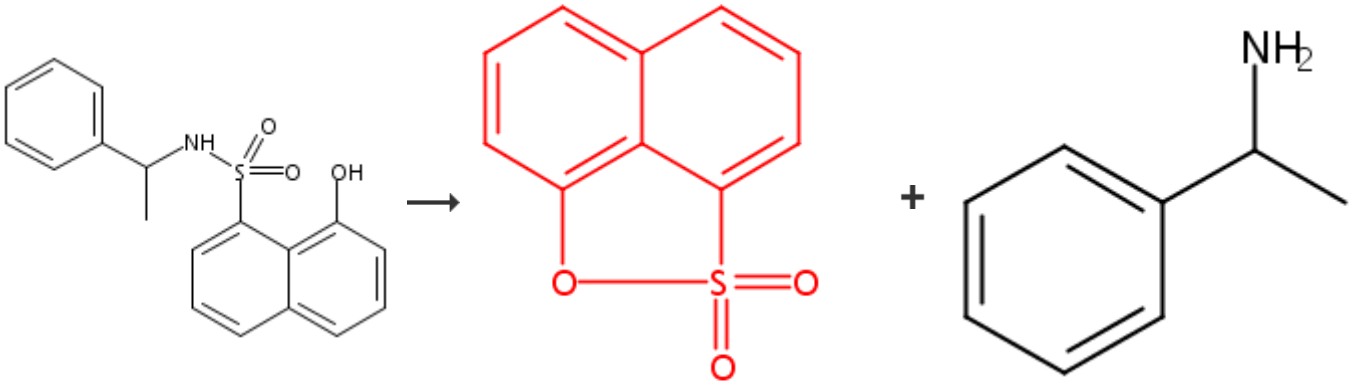
References

Efficient C-N formation for preparing α-branched primary amines by recycled intramolecular reactions of 1,8-naphthosultone using ammonia as nitrogen source

By Zhou, Xinrui et al

From Chinese Journal of Chemical Engineering, 22(4), 405-410; 2014

5. Single Step



7%

Overview

Steps/Stages

1.1 R:NaOH

Notes

combined yield, 20.2%, selectivity (85%), Reactants: 1, Reagents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

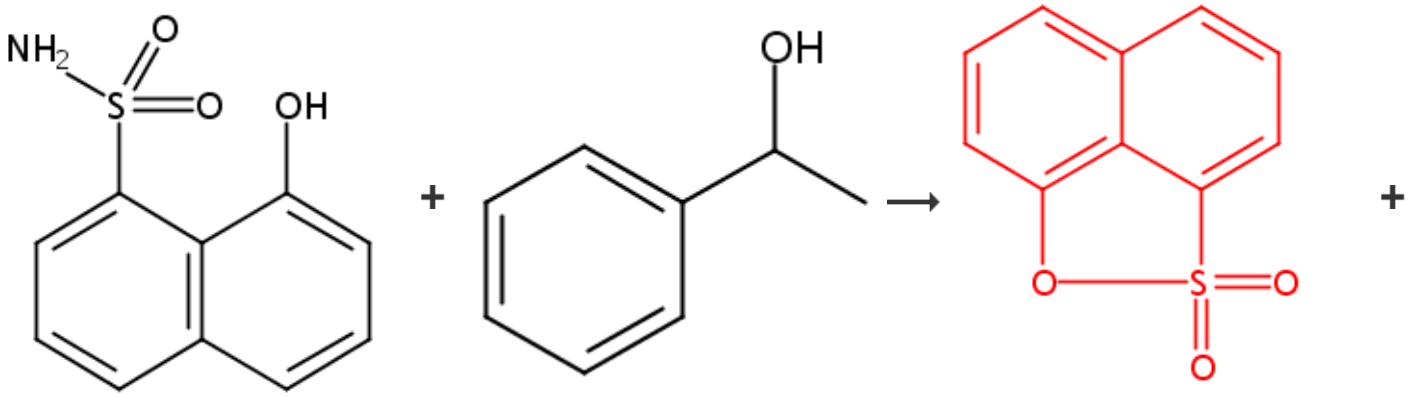
References

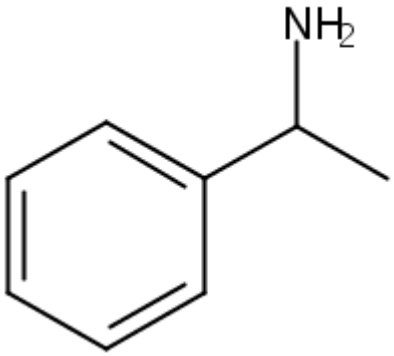
Efficient C-N formation for preparing α-branched primary amines by recycled intramolecular reactions of 1,8-naphthosultone using ammonia as nitrogen source

By Zhou, Xinrui et al

From Chinese Journal of Chemical Engineering, 22(4), 405-410; 2014

6. 2 Steps





Overview

Steps/Stages

1.1 C:1227872-65-2, 24 h, 70°C

2.1 R:NaOH

Notes

2) combined yield, 20.2%, selectivity (85%), Reactants: 2, Reagents: 1, Catalysts: 1, Steps: 2, Stages: 2, Most stages in any one step: 1

References

Efficient C-N formation for preparing α-branched primary amines by recycled intramolecular reactions of 1,8-naphthosultone using ammonia as nitrogen source

By Zhou, Xinrui et al

From Chinese Journal of Chemical Engineering, 22(4), 405-410; 2014