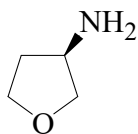




>>Entry Name: 3-Aminotetrahydrofuran

Synonym(s): Tetrahydro-3-furanamine, 9CI



(*R*)-form

CAS Registry Number: 88675-24-5

Molecular Formula: C₄H₉NO

Molecular Weight: 87.121

Accurate Mass: 87.068414

Percentage Composition: C 55.15%; H 10.41%; N 16.08%; O 18.36%

>>Variant: (*R*)-form

Molecular Formula: C₄H₉NO

Molecular Weight: 87.121

Accurate Mass: 87.068414

Percentage Composition: C 55.15%; H 10.41%; N 16.08%; O 18.36%

>>Derivative: 4-Methylbenzenesulfonyl

CAS Registry Number: 111769-27-8

Molecular Formula: C₁₁H₁₅NO₃S

Molecular Weight: 241.31

Accurate Mass: 241.077264

Percentage Composition: C 54.75%; H 6.27%; N 5.80%; O 19.89%; S 13.29%

Physical Description: Cryst. (MeOH/Et₂O)

Melting Point: Mp 140°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -4$ (c, 2 in MeOH)

>>Variant: (*S*)-form

Molecular Formula: C₄H₉NO

Molecular Weight: 87.121

Accurate Mass: 87.068414

Percentage Composition: C 55.15%; H 10.41%; N 16.08%; O 18.36%

>>Derivative: 4-Methylbenzenesulfonyl

CAS Registry Number: 104530-80-5

Molecular Formula: C₁₁H₁₅NO₃S

Molecular Weight: 241.31

Accurate Mass: 241.077264

Percentage Composition: C 54.75%; H 6.27%; N 5.80%; O 19.89%; S 13.29%

Physical Description: Cryst. (MeOH/Et₂O)

Melting Point: Mp 139°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +3.9$ (c, 2 in MeOH)

>>Variant: (±)-form

Molecular Formula: C₄H₉NO

Molecular Weight: 87.121

Accurate Mass: 87.068414

Percentage Composition: C 55.15%; H 10.41%; N 16.08%; O 18.36%

Boiling Point: Bp₅₉ 73°

Density: d²⁰ 1.02

Refractive Index: n_D²⁰ 1.4591

References:

Korobitsyna, I.K. *et al.*, *Zh. Obshch. Khim.*, 1955, **25**, 563-565; *CA*, **50**, 3383f, (*synth*)

Eugster, C.H. *et al.*, *Helv. Chim. Acta*, 1957, **40**, 886-887, (*synth*)

Barlos, K. *et al.*, *Annalen*, 1988, 1127-1133, (*4-methylbenzenesulfonyl*)