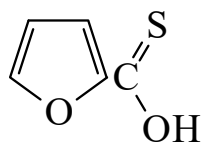




>>Entry Name: 2-Furancarbothioic acid, 9CI

ENTRY UNDER REVIEW

Synonym(s): Thio-2-furoic acid, 8CI



CAS Registry Number: 4741-45-1

Molecular Formula: C₅H₄O₂S

Molecular Weight: 128.151

Accurate Mass: 127.9932

Percentage Composition: C 46.86%; H 3.15%; O 24.97%; S 25.02%

Physical Description: Liq.

Boiling Point: Bp₁₆ 101°

>>Derivative: Hydrazide

Synonym(s): 2-Furanthiocarboxhydrazide

CAS Registry Number: 68062-22-6

Molecular Formula: C₅H₆N₂OS

Molecular Weight: 142.181

Accurate Mass: 142.020083

Percentage Composition: C 42.24%; H 4.25%; N 19.70%; O 11.25%; S 22.55%

Use/Importance: Used as 0.01M EtOH soln. for extraction-photometric detn. of Pt(IV) (λ_{max} 715 nm, pH 5.4-6.0, 4-methyl-2-pentanone), Os(VI, VIII), Ru(III), Re(VII)

Physical Description: Cryst. (hot H₂O or C₆H₆)

Melting Point: Mp 130-131°

Solubility: Sol. EtOH, C₆H₆; mod. sol. H₂O

>>Variant: SH-form

Molecular Formula: C₅H₄O₂S

Molecular Weight: 128.151

Accurate Mass: 127.9932

Percentage Composition: C 46.86%; H 3.15%; O 24.97%; S 25.02%

>>Derivative: S-Me ester

Synonym(s): Methyl 2-thiofuroate. FEMA 3311

CAS Registry Number: 13679-61-3

Molecular Formula: C₆H₆O₂S

Molecular Weight: 142.178

Accurate Mass: 142.00885

Percentage Composition: C 50.69%; H 4.25%; O 22.51%; S 22.55%

Boiling Point: Bp₁₁ 92-93°

References:

Jensen, K.A. *et al.*, *Acta Chem. Scand.*, 1961, **15**, 1097, (*synth, hydrazide*)

Niwa, E. *et al.*, *CA*, 1968, **68**, 49377w, (*synth*)

Shome, S.C. *et al.*, *Mikrochim. Acta*, 1978, **2**, 343, (*synth, use*)

Fenaroli's Handbook of Flavor Ingredients, 3rd edn., (ed. Burdock, G.A.), CRC Press, 1995, 571, (*S-Me ester*)

Encyclopedia of Food and Color Additives, (ed. Burdock, G.A.), CRC Press, 1997, 1869-1870, (*S-Me ester*)