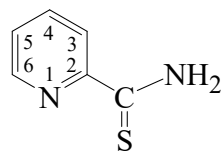




>>Entry Name: 2-Pyridinecarbothioamide

Synonym(s): 2-Thiopicolinamide. 2-Thiocarbamoylpyridine



CAS Registry Number: 5346-38-3

Molecular Formula: C₆H₆N₂S

Molecular Weight: 138.193

Accurate Mass: 138.025168

Percentage Composition: C 52.15%; H 4.38%; N 20.27%; S 23.20%

Use/Importance: Used for extraction-photometric detn. of Fe ($\lambda_{\max}$ 615 nm, ϵ 13600)

Physical Description: Needles (EtOH)

Melting Point: Mp 137°

>>Derivative: *N*-Butyl

Synonym(s): *N*-Butyl-2-pyridinecarbothioamide, 9Cl. *N*-Butyl-2-thiopicolinamide

CAS Registry Number: 52379-35-8

Molecular Formula: C₁₀H₁₄N₂S

Molecular Weight: 194.3

Accurate Mass: 194.087768

Percentage Composition: C 61.82%; H 7.26%; N 14.42%; S 16.50%

Use/Importance: Used as 1mM soln. in CHCl₃ for extraction separation of microamounts of Au(III) (from 3.3M HCl), Pd ($\lambda_{\max}$ 361 nm, ϵ 62400), Ag

Physical Description: Yellow cryst. (petrol)

Melting Point: Mp 44-45°

Solubility: Sol. CHCl₃, CCl₄, 1,2-dichloroethane, EtOH, C₆H₆, Me₂CO; spar. sol. H₂O

>>Derivative: *N*-Benzyl

Synonym(s): *N*-(Phenylmethyl)-2-pyridinecarbothioamide. *N*-Benzyl-2-thiopicolinamide

CAS Registry Number: 52379-37-0

Molecular Formula: C₁₃H₁₂N₂S

Molecular Weight: 228.317

Accurate Mass: 228.072118

Percentage Composition: C 68.39%; H 5.30%; N 12.27%; S 14.04%

Use/Importance: Used as 1mM soln. in CHCl₃ for extraction separation of Au(III) (from 4.5M HCl medium), Pd, Ag, Pt

Physical Description: Yellow cryst.

Solubility: Sol. CHCl₃, CCl₄, 1,2-dichloroethane, EtOH

>>Derivative: *N*-Ph

Synonym(s): *N*-Phenyl-2-pyridinecarbothioamide, 9Cl. *N*-Phenyl-2-thiopicolinamide

CAS Registry Number: 13225-84-8

Molecular Formula: C₁₂H₁₀N₂S

Molecular Weight: 214.29

Accurate Mass: 214.056468

Percentage Composition: C 67.26%; H 4.70%; N 13.07%; S 14.96%

Use/Importance: Used as 1mM soln. in CHCl₃ for extraction separation of microamounts of Au(III) (from 4.2M HCl), Pd, Ag, Pt

Physical Description: Yellow cryst.

Melting Point: Mp 46-47°

Solubility: Sol. CHCl₃, CCl₄, 1,2-dichloroethane, EtOH

Rare Chemicals Library: S13714-6

>>Derivative: *N*-(2-Methylphenyl)

Synonym(s): *N*-(2-Methylphenyl)-2-pyridinecarbothioamide, 9Cl. *N*-*o*-Tolyl-2-thiopicolinamide

CAS Registry Number: 21259-33-6

Molecular Formula: C₁₃H₁₂N₂S

Molecular Weight: 228.317

Accurate Mass: 228.072118

Percentage Composition: C 68.39%; H 5.30%; N 12.27%; S 14.04%

Use/Importance: Used as 1mM soln. in CHCl₃ for extraction separation of microamounts of Au(III) (from 5.4M HCl), Pd, Ag, Pt; flotation separation of S²⁽⁻⁾