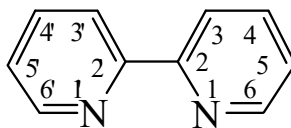




>>Entry Name: 2,2'-Bipyridine, 9Cl

Synonym(s): 2,2'-Bipyridyl. α,α' -Bipyridyl. Bipy



CAS Registry Number: 366-18-7

Extra CAS Registry Numbers(s): 37275-48-2

Molecular Formula: $C_{10}H_8N_2$

Molecular Weight: 156.187

Accurate Mass: 156.068748

Percentage Composition: C 76.90%; H 5.16%; N 17.94%

Use/Importance: Used in photometric detn. of Fe(II) ($\lambda_{\max}$ 522 nm, ϵ 8700, pH 2-9); as a masking agent for Zn, Cd, Cu. Fe(II) chelate is used as a redox indicator.

Complexing agent for prepn. of inorganic complexes

Physical Description: Prisms (petrol)

Melting Point: Mp 69.5°

Boiling Point: Bp 272.5°

Solubility: Sol. H_2O , EtOH, Et_2O , C_6H_6 , $CHCl_3$, dil. acids

pKa Value: pK_{a1} 4.3 (25°, H_2O)

Other Data: Fe^{II} salts $\rightarrow$ red col.

Hazard & Toxicity: LD₅₀ (rat, orl) 100 mg/kg. Exp. teratogen

Aldrich: D21630-5

Fluka: 14454

Sigma: D7505

>>Derivative: Methiodide

CAS Registry Number: 77972-47-5

Physical Description: Yellow-white needles (Et_2O /MeCN)

Melting Point: Mp 143-145°

>>Derivative: Chlorochromate

CAS Registry Number: 76899-34-8

Molecular Formula: $C_{10}H_9ClCrN_2O_3$

Molecular Weight: 292.642

Accurate Mass: 291.970679

Percentage Composition: C 41.04%; H 3.10%; Cl 12.11%; Cr 17.77%; N 9.57%; O 16.40%

Use/Importance: Used to oxidise acid labile primary and secondary alcohols to carbonyl compounds

Physical Description: Yellow cryst.

>>Derivative: Mono-*N*-oxide

CAS Registry Number: 33421-43-1

Molecular Formula: $C_{10}H_8N_2O$

Molecular Weight: 172.186

Accurate Mass: 172.063663

Percentage Composition: C 69.76%; H 4.68%; N 16.27%; O 9.29%

Melting Point: Mp 59°

Rare Chemicals Library: S95494-2

>>Derivative: *N,N'*-Dioxide

CAS Registry Number: 7275-43-6

Molecular Formula: $C_{10}H_8N_2O_2$

Molecular Weight: 188.185

Accurate Mass: 188.058578

Percentage Composition: C 63.83%; H 4.28%; N 14.89%; O 17.00%

Melting Point: Mp 310 dec.°

Aldrich: 36417-7

Rare Chemicals Library: S95495-0