



>>>Derivative: Phenylhydrazone, hydrochloride

Physical Description: Needles (EtOH)

Melting Point: Mp 196°

>>>Derivative: 4-Nitrophenylhydrazone

CAS Registry Number: 70421-66-8

Molecular Formula: C₁₂H₁₀N₄O₂

Molecular Weight: 242.237

Accurate Mass: 242.080376

Percentage Composition: C 59.50%; H 4.16%; N 23.13%; O 13.21%

Use/Importance: Acid-base indicator and reagent for spectrophotometric detn. of Pd

Physical Description: Cryst.

Melting Point: Mp 264°

>>>Derivative: Semicarbazone

CAS Registry Number: 13370-79-1

Molecular Formula: C₇H₈N₄O

Molecular Weight: 164.166

Accurate Mass: 164.069811

Percentage Composition: C 51.21%; H 4.91%; N 34.13%; O 9.75%

Physical Description: Needles (EtOH)

Melting Point: Mp 195-196°

Rare Chemicals Library: S91474-6

>>>Derivative: Thiosemicarbazone

CAS Registry Number: 61043-10-5

Extra CAS Registry Numbers(s): 3608-75-1

Molecular Formula: C₇H₈N₄S

Molecular Weight: 180.233

Accurate Mass: 180.046966

Percentage Composition: C 46.65%; H 4.47%; N 31.09%; S 17.79%

Physical Description: Yellow needles (MeOH)

Melting Point: Mp 208-210 dec.°

>>>Derivative: Thiosemicarbazone, hydrochloride

Physical Description: Yellow cryst.

Melting Point: Mp 236 dec.°

>>>Derivative: Selenosemicarbazone

CAS Registry Number: 40324-80-9

Molecular Formula: C₇H₈N₄Se

Molecular Weight: 227.127

Accurate Mass: 227.991416

Percentage Composition: C 37.02%; H 3.55%; N 24.67%; Se 34.76%

Use/Importance: Used as a 2mM soln. in EtOH for photometric detn. of Co ($\lambda_{\max}$ 435 nm, ϵ 5500), Cu ($\lambda_{\max}$ 388 nm), Fe(II) ($\lambda_{\max}$ 615 nm, ϵ 6900), Fe(III) ($\lambda_{\max}$ 445 nm, ϵ 6800), Ni ($\lambda_{\max}$ 400 nm, ϵ 10700)

Physical Description: Brown needles (EtOH)

Melting Point: Mp 212-214°

pKa Value: pK_{a1} 9.6

>>>Derivative: N-Oxide

CAS Registry Number: 7216-40-2

Molecular Formula: C₆H₅NO₂

Molecular Weight: 123.111

Accurate Mass: 123.032029

Percentage Composition: C 58.54%; H 4.09%; N 11.38%; O 25.99%

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 92°

References: