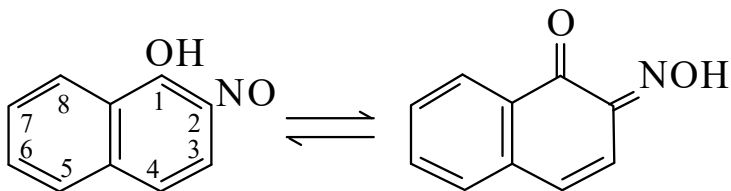




>>Entry Name: 2-Nitroso-1-naphthol

Synonym(s): 2-Nitroso-1-naphthalenol, 9CI. 1,2-Naphthoquinone 2-oxime. 1,2-Naphthalenedione 2-oxime, 9CI



CAS Registry Number: 132-53-6

Molecular Formula: $C_{10}H_7NO_2$

Molecular Weight: 173.171

Accurate Mass: 173.047679

Percentage Composition: C 69.36%; H 4.07%; N 8.09%; O 18.48%

Use/Importance: Complexing agent for transition metals. Used as 0.5% soln. in AcOH for extraction-photometric detn. of Co ($\lambda_{\max}$ 365 nm, ϵ 37000, isopentyl acetate), Ni, Pd, Ru

Physical Description: Yellow needles (H_2O or C_6H_6)

Melting Point: Mp 162-164 dec. $^{\circ}$

Solubility: Sol. AcOH, EtOH, alkalis

pKa Value: pK_{a1} 7.24 (25 $^{\circ}$, 0.1M NaClO₄)

Other Data: Steam-volatile. Conc. $H_2SO_4 \rightarrow$ intense red soln.

Hazard & Toxicity: Exp. reprod. effects

Aldrich: 11470-7

Fluka: 73920

Sigma: N4383

>>Derivative: Me ether

Synonym(s): 1-Methoxy-2-nitrosonaphthalene

CAS Registry Number: 53711-02-7

Molecular Formula: $C_{11}H_9NO_2$

Molecular Weight: 187.198

Accurate Mass: 187.063329

Percentage Composition: C 70.58%; H 4.85%; N 7.48%; O 17.09%

Physical Description: Yellowish-green needles (EtOH aq.)

Melting Point: Mp 95 $^{\circ}$

>>Derivative: Et ether

Synonym(s): 1-Ethoxy-2-nitrosonaphthalene

Molecular Formula: $C_{12}H_{11}NO_2$

Molecular Weight: 201.224

Accurate Mass: 201.078979

Percentage Composition: C 71.63%; H 5.51%; N 6.96%; O 15.90%

Physical Description: Greenish-yellow needles

Melting Point: Mp 101 $^{\circ}$

References: