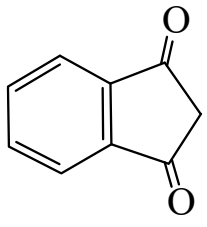
>>**Entry Name: 1,3-Indanedione**
Synonym(s): 1,3-Dioxohydrindene



CAS Registry Number: 606-23-5

Molecular Formula: $C_9H_6O_2$
Molecular Weight: 146.145
Accurate Mass: 146.03678
Percentage Composition: C 73.97%; H 4.14%; O 21.90%
Physical Description: Needles (petrol)
Melting Point: Mp 130-131°
Solubility: Spar. sol. H_2O, sol. hot EtOH, C_6H_6
pKa Value: pK_a 7.2 (20°, 1% EtOH)
Other Data: Deep-yellow soln. in alkali (enol form)
Hazard & Toxicity: Exp. reprod. and teratogenic effects

Aldrich: I-200-2
Fluka: 56860

>>**Derivative:** Dioxime

CAS Registry Number: 6624-48-2
Molecular Formula: $C_9H_8N_2O_2$
Molecular Weight: 176.174
Accurate Mass: 176.058578
Percentage Composition: C 61.36%; H 4.58%; N 15.90%; O 18.16%
Melting Point: Mp 220-225 dec.°

>>**Derivative:** Phenylhydrazone

Melting Point: Mp 162-163°

>>**Derivative:** Bisphenylhydrazone

Physical Description: Pink needles
Melting Point: Mp 171°

>>**Derivative:** Bis(thiosemicarbazone)
Synonym(s): 2,2'-(1*H*-Indene-1,3(2*H*)-diylidene)bishydrazinecarbothioamide, 9Cl

CAS Registry Number: 3401-45-4

Molecular Formula: $C_{11}H_{12}N_6S_2$
Molecular Weight: 292.388
Accurate Mass: 292.056484
Percentage Composition: C 45.19%; H 4.14%; N 28.74%; S 21.93%
Use/Importance: Used as 0.8% DMF soln. for photometric detn. of $IO_4^{(-)}$ (λ_{max} 520 nm, ε 4800, pH 1.7-2.5)
Physical Description: Grey powder (Py aq.)
Melting Point: Mp 236-242 dec.°
Solubility: Sol. Py, DMF; insol. H_2O, EtOH, Et_2O, C_6H_6

References:

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