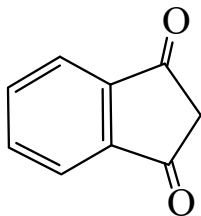




>>Entry Name: **1,3-Indanedione**

Synonym(s): 1,3-Dioxohydrindene



CAS Registry Number: 606-23-5

Molecular Formula: C₉H₆O₂

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. H₂O, sol. hot EtOH, C₆H₆

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: C₉H₈N₂O₂

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, 9CI

CAS Registry Number: 3401-45-4

Molecular Formula: C₁₁H₁₂N₆S₂

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 IO₄⁽⁻⁾ (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. H₂O, EtOH, Et₂O, C₆H₆

References:

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