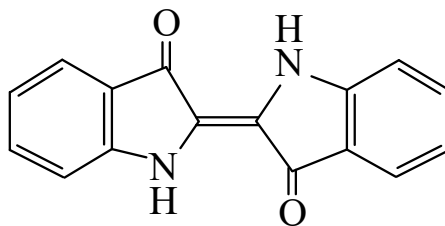




>>Entry Name: Indigotin

Synonym(s): $\Delta^{2,2'}$ -Biindoline-3,3'-dione, 8Cl. Indigo. Indigo blue. C.I. Vat Blue 1. $\Delta^{2,2'}$ -Bipseudoindoxyl. Diindogen



CAS Registry Number: 482-89-3

Molecular Formula: $C_{16}H_{10}N_2O_2$

Molecular Weight: 262.267

Accurate Mass: 262.074228

Percentage Composition: C 73.27%; H 3.84%; N 10.68%; O 12.20%

Biological Source: Known since ancient times; obt. from various plants e.g. *Indigofera tinctoria*, where it occurs as its precursor Indican

Physical Description: Blue powder with coppery lustre

Melting Point: Mp 390-392°

Solubility: Insol. H_2O

Other Data: Sublimes

Aldrich: 22929-6

Fluka: 56980

Sigma: I1881

>>Derivative: 1,1'-Di-Ac

CAS Registry Number: 33934-64-4

Molecular Formula: $C_{20}H_{14}N_2O_4$

Molecular Weight: 346.342

Accurate Mass: 346.095358

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

Physical Description: Red cryst.

Melting Point: Mp 200-220°

>>Derivative: 1,1'-N-Dibenzoyl

Molecular Formula: $C_{30}H_{18}N_2O_4$

Molecular Weight: 470.483

Accurate Mass: 470.126658

Percentage Composition: C 76.59%; H 3.86%; N 5.95%; O 13.60%

Physical Description: Viol. cryst.

Melting Point: Mp 254°. Mp 257°

>>Derivative: N-Me

CAS Registry Number: 23831-49-4

Molecular Formula: $C_{17}H_{12}N_2O_2$

Molecular Weight: 276.294

Accurate Mass: 276.089878

Percentage Composition: C 73.90%; H 4.38%; N 10.14%; O 11.58%

Melting Point: Mp 254°

>>Derivative: Di-N-Me

CAS Registry Number: 18996-72-0

Molecular Formula: $C_{18}H_{14}N_2O_2$

Molecular Weight: 290.321

Accurate Mass: 290.105528

Percentage Composition: C 74.47%; H 4.86%; N 9.65%; O 11.02%

Melting Point: Mp 182-183°

Solubility: Sol. nonpolar solvs.

Other Data: Green in soln. Shows bathochromicity compared with indigotin owing to nonpolarity. Has no affinity for cotton fibres