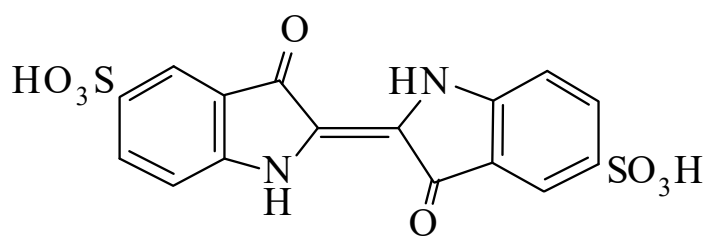




>>Entry Name: Indigo-5,5'-disulfonic acid

ENTRY UNDER REVIEW

Synonym(s): 2-(1,3-Dihydro-3-oxo-5-sulfo-2*H*-indol-2-ylidene)-2,3-dihydro-3-oxo-1*H*-indole-5-sulfonic acid, 9Cl. 3,3'-Dioxo[$\Delta^{2,2'}$ -biindoline]-5,5'-disulfonate, 8Cl. Indigotindisulfonic acid



CAS Registry Number: 483-20-5

Molecular Formula: C₁₆H₁₀N₂O₈S₂

Molecular Weight: 422.396

Accurate Mass: 421.987858

Percentage Composition: C 45.50%; H 2.39%; N 6.63%; O 30.30%; S 15.18%

Source/Synthesis: Obt. by sulfonating indigo with conc. or sl. fuming H₂SO₄ (Barth, 1740)

Physical Description: Cryst.

Solubility: Sol. H₂O

>>Derivative: Di-Na salt

Synonym(s): Indigotin disulfonate sodium, USAN. C.I. Acid blue 74. C.I. Food blue 1. C.I. Pigment blue 63. C.I. 73015. Indigo carmine. Soluble indigo blue. Amacid brilliant blue. Carmine blue. **Indigotin**‡. FD and C Blue No. 2. E132

CAS Registry Number: 860-22-0

Use/Importance: Dye used in cytoscropy as diagnostic aid, in indicators and cosmetics. Used as 0.2% aq. soln. as indicator in titrimetric detn. of Cr(II), Sn(II), Fe(III), Ti(III); used for photometric detn. of O₂ ($\lambda_{\max}$ 620 nm), Cl₂, NO₃⁽⁻⁾, MnO₄⁽⁻⁾; indirect photometric detn. of O₃ ($\lambda_{\max}$ 610 nm, ϵ 22000). Biological stain

Physical Description: Dark blue solid

Solubility: Sol. H₂O; sl. sol. EtOH; insol. C₆H₆, CHCl₃

Other Data: Sensitive to light and oxidizing agents

Hazard & Toxicity: LD₅₀ (rat, orl) 2000 mg/kg

Aldrich: 20669-5

Fluka: 57000

Sigma: I2387

>>Derivative: Al salt

Synonym(s): C.I. Pigment Blue 63

CAS Registry Number: 16521-38-3

Extra CAS Registry Numbers(s): 12227-85-9 39290-72-7 53026-58-7

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