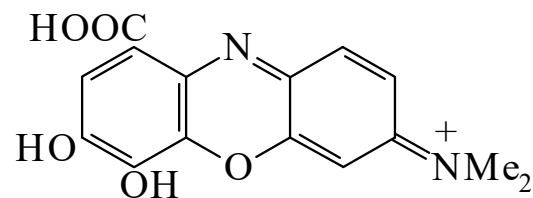




>>Entry Name: Gallocyanine

Synonym(s): 1-Carboxy-7-(dimethylamino)-3,4-dihydroxyphenoxazin-5-ium(1+), 9Cl. 7-Dimethylamino-3*H*-4-hydroxy-3-oxophenoxazine-1-carboxylic acid. C.I. Mordant blue 10. C.I. 51030. Alizarine navy blue AT. Brilliant chrome blue P



Molecular Formula: C₁₅H₁₃N₂O₅⁽⁺⁾

Molecular Weight: 301.278

Accurate Mass: 301.082448

Percentage Composition: C 59.80%; H 4.35%; N 9.30%; O 26.55%

General Statement: Strictly, the name Gallocyanine applies to the chloride

>>Derivative: Chloride

CAS Registry Number: 1562-85-2

Use/Importance: Used as a 1% soln. in AcOH as metallochromic indicator in titrimetric detn. of Ga, Th

Physical Description: Dark reddish blue cryst. powder

Solubility: Sl. sol. AcOH, EtOH; insol. H₂O

Aldrich: 12450-8

Fluka: 48610

Sigma: G8884

>>Derivative: Me ester, chloride

CAS Registry Number: 6416-51-9

Molecular Formula: C₁₆H₁₅ClN₂O₅

Molecular Weight: 350.758

Accurate Mass: 350.06695

Percentage Composition: C 54.79%; H 4.31%; Cl 10.11%; N 7.99%; O 22.81%

Use/Importance: Used as a 0.2mM soln. in EtOH for photometric detn. of Bi ($\lambda_{\max}$ 563 nm, ϵ 23400)

Physical Description: Orange cryst.

Solubility: Sol. EtOH

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 888A, (*ir*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 386

Milner, G.W.C., *Analyst (London)*, 1955, **80**, 77, (*detn, Ga*)

Specker, H. *et al.*, *Fresenius' Z. Anal. Chem.*, 1956, **149**, 97, (*detn, Ga*)

Sangal, S.P. *et al.*, *CA*, 1961, **55**, 13164, (*detn, Th*)

Kotoucek, M. *et al.*, *Coll. Czech. Chem. Comm.*, 1977, **42**, 235, (*deriv, use*)