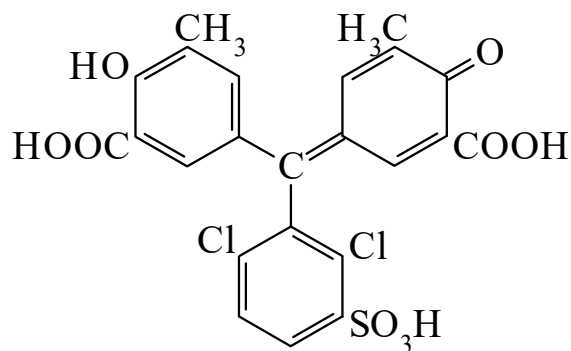




>>Entry Name: Chromazurol S

Synonym(s): 5-[(3-Carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulphophenyl)methyl]-2-hydroxy-3-methylbenzoic acid, 9Cl. Chrome azurol S. Solochrome brilliant blue. Alberon. C.I. Mordant blue 29. C.I. 43825. CAS



CAS Registry Number: 3564-17-8

Molecular Formula: C₂₃H₁₆Cl₂O₉S

Molecular Weight: 539.345

Accurate Mass: 537.989209

Percentage Composition: C 51.22%; H 2.99%; Cl 13.15%; O 26.70%; S 5.95%

General Statement: Strictly, the name Chromazurol S applies to the trisodium salt

>>Derivative: Tri-Na salt

CAS Registry Number: 1667-99-8

Use/Importance: Used as 0.05-0.1% soln. in photometric detn. of Al, Be, Co, Cr, Cu, Fe, Ga, In, Mo, Ni, Sc, Th, Ti, U, V, Zr (pH 3-8); metal indicator in chelatometric titration. Use of surfactants increases sensitivity

Physical Description: Red-brown cryst. powder

Solubility: Sol. H₂O

Other Data: Available as dihydrate

Aldrich: 19953-2

Fluka: 27090

Rare Chemicals Library: S57041-9

Sigma: C1018

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1032B, (ir)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 203

Malat, M., *Anal. Chim. Acta*, 1961, **25**, 289, (dissoc)

Malanik, V. *et al.*, *Anal. Chim. Acta*, 1975, **76**, 464, (purifn)

Moukova, N. *et al.*, *Coll. Czech. Chem. Comm.*, 1981, **46**, 354, (acid-base props)

Cheng, K.L. *et al.*, *Handbook of Organic Analytical Reagents*, CRC Press, Boca Raton, 1982, 53, (use)

Tikhonov, V.N., *Zh. Anal. Khim.*, 1984, **39**, 1796, (use)

Onishi, H., *Photometric Determination of Traces of Metals, Part IIa: Individual Metals. Aluminium to Lithium*, John Wiley, New York, 4th Ed., 1986, 26

Marczenko, Z., *Separation and Spectrophotometric Determination of Elements*, Horwood, Chichester, 2nd Ed., 1986, 100; 163