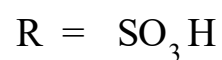
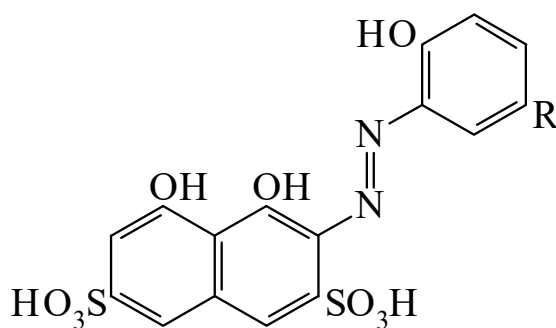




>>Entry Name: Acid chrome blue K

Synonym(s): 4,5-Dihydroxy-3-[(2-hydroxy-5-sulfophenyl)azo]-2,7-naphthalenedisulfonic acid. 7-(2-Hydroxy-5-sulfophenylazo)chromotropic acid. C.I. Mordant blue 31. C.I. 16675



CAS Registry Number: 25849-37-0

Molecular Formula: C₁₆H₁₂N₂O₁₂S₃

Molecular Weight: 520.475

Accurate Mass: 519.955238

Percentage Composition: C 36.92%; H 2.32%; N 5.38%; O 36.89%; S 18.48%

General Statement: Strictly the name Acid chrome blue K applies to the trisodium salt

>>Derivative: Tri-Na salt

CAS Registry Number: 3270-25-5

Use/Importance: Used as 0.1% aq. or EtOH soln. in photometric detn. of Nb, V, Zr, Mg (λ_{max} 505 nm); fluorimetric detn. of Al, Ga, Sc; as metal indicator for Ca (pH 12), Cd, Mg, Pb, Zn (pH 10), La, Th, Y

Physical Description: Bluish cryst. powder

Solubility: Sol. H₂O, EtOH; spar. sol. Me₂CO

pKa Value: pK_{a2} 10.2; pK_{a3} 14.6

References:

- Lazarev, A.I. *et al.*, *Zavod. Lab.*, 1959, **25**, 542, (*detn.* Cd, Zn)
Korenman, I.M. *et al.*, *Zh. Anal. Khim.*, 1960, **15**, 36, (*detn.* Al, Ga, Sc, Th, Y)
Morachevskii, Y.V. *et al.*, *Zh. Anal. Khim.*, 1961, **16**, 106, (*detn.* V)
Bezdekova, A. *et al.*, *Coll. Czech. Chem. Comm.*, 1966, **31**, 199, (*pKa*)
Hiraki, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1972, **45**, 789, (*detn.* Al, Ga, Sc)
Tselinskii, Y.K. *et al.*, *CA*, 1974, **81**, 57807v, (*detn.* Zn)
Stolyarov, K.P. *et al.*, *CA*, 1975, **82**, 50975k, (*detn.* Y, La)