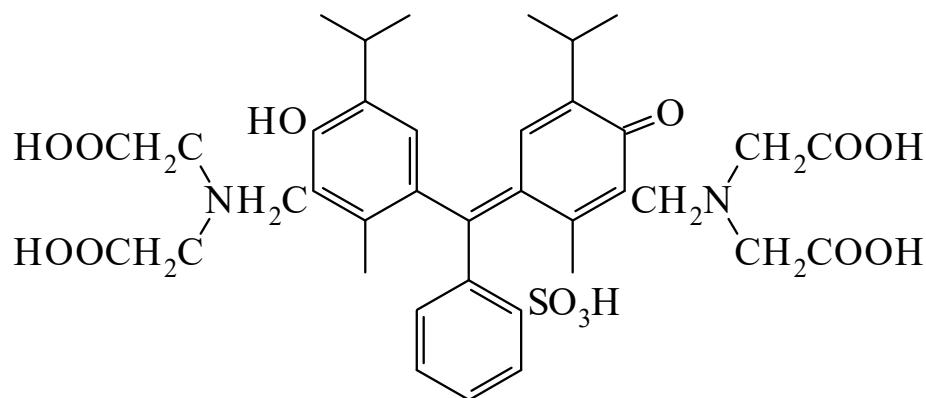




>>Entry Name: Methylthymol blue

Synonym(s): *N,N'*-[3*H*-2,1-Benzoxathiol-3-ylidenebis[[6-hydroxy-2-methyl-5-(1-methylethyl)-3,1-phenylene]methylene]]bis[*N*-(carboxymethyl)]glycine, 9Cl. 3,3'-Bis[*N,N*-di(carboxymethyl)aminomethyl]thymolsulfonephthalein. Thymolphthalexon S



CAS Registry Number: 1945-77-3

Related CAS Registry Numbers(s): 3778-22-1

Molecular Formula: C₃₇H₄₄N₂O₁₃S

Molecular Weight: 756.826

Accurate Mass: 756.256413

Percentage Composition: C 58.72%; H 5.86%; N 3.70%; O 27.48%; S 4.24%

Use/Importance: Used as 0.5mM soln. in dil. formic acid for photometric detn. of Be, Al, Sb, Bi, Ga, In, Fe(III), Cr(III), Cd, La, Sc, Ti, V, Nb, Th (λ_{max} 580 nm, ϵ 5000), SO₄²⁽⁻⁾

Physical Description: Dark violet cryst. powder

Solubility: Sol. H₂O; insol. EtOH and other common org. solvs.

pKa Value: pK_{a5} 2.6; pK_{a6} 3.2; pK_{a7} 7.2; pK_{a8} 11.2 (μ = 0.2)

Aldrich: B4200-4

Fluka: 69410

Sigma: M2255

References:

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Karadakov, B. *et al.*, *Talanta*, 1968, **15**, 525, (detn, Fe)

Adam, J. *et al.*, *Talanta*, 1969, **16**, 1596, (detn, Th)

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