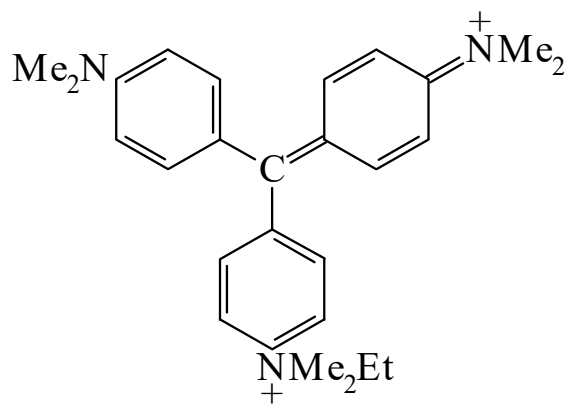




>>Entry Name: Methyl green

Synonym(s): 4-[[4-(Dimethylamino)phenyl][4-(dimethylimino)-2,5-cyclohexadien-1-ylidene]methyl]-N-ethyl-N,N-dimethylbenzenaminium(2+), 9Cl. C.I. 42590



CAS Registry Number: 22244-13-9

Related CAS Registry Numbers(s): 7114-03-6

Molecular Formula: $C_{27}H_{35}N_3^{2(+)}$

Molecular Weight: 401.594

Accurate Mass: 401.283097

Percentage Composition: C 80.75%; H 8.78%; N 10.46%

>>Derivative: Bromide chloride

CAS Registry Number: 14855-76-6

Molecular Formula: $C_{27}H_{35}BrClN_3$

Molecular Weight: 516.95

Accurate Mass: 515.190285

Percentage Composition: C 62.73%; H 6.82%; Br 15.46%; Cl 6.86%; N 8.13%

Use/Importance: Used as aq. soln. for extraction-photometric detn. of Bi, Sb, Ga, Tl(III), Ta, Hg(II), Pt (ϵ 145000, 1,2-dichloroethane), Re ($\lambda_{\max}$ 640 nm, ϵ 120000, C_6H_6). Used as biological stain, and in dyeing and printing textiles. Commercially available as double salt with $ZnCl_2$

Physical Description: Green cryst.

Solubility: Sol. H_2O

References:

Shestidesyatnaya, P.P. *et al.*, *Zh. Anal. Khim.*, 1970, **25**, 1547, (*detn. Bi*)

Tarayan, V.N. *et al.*, *Zh. Anal. Khim.*, 1971, **26**, 1745; 1972, **27**, 19; 1977, **32**, 1456, (*detn. Ta, Tl*)

Ovsepyan, E.N. *et al.*, *Zh. Anal. Khim.*, 1983, **38**, 1277, (*detn. Pt*)