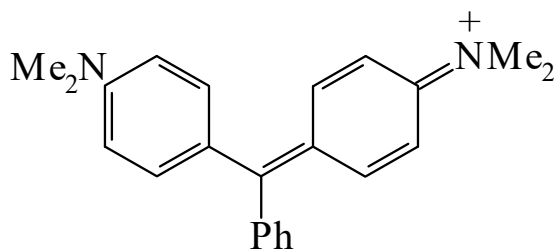




>>>Entry Name: Malachite green

Synonym(s): *N*-[4-[[4-(Dimethylamino)phenyl]phenylmethylene]-2,5-cyclohexadien-1-ylidene]-*N*-methylethanaminium(1+). C.I. Basic green 4. Aniline green. China green. Diamond green B. Victoria green B. C.I. 42000



CAS Registry Number: 10309-95-2

Molecular Formula: C₂₃H₂₅N₂⁽⁺⁾

Molecular Weight: 329.464

Accurate Mass: 329.201773

Percentage Composition: C 83.85%; H 7.65%; N 8.50%

>>>Derivative: Chloride

CAS Registry Number: 569-64-2

Molecular Formula: C₂₃H₂₅ClN₂

Molecular Weight: 364.917

Accurate Mass: 364.170625

Percentage Composition: C 75.70%; H 6.91%; Cl 9.72%; N 7.68%

Use/Importance: Used for photometric detn. of many elements (e.g. As, Sb, Bi, B, Ga, In, Ge, Si, Re, Ir, Rh, Au(III), Hg, Pd, Ta, U, ClO₄^m); biological stain. Acid-base indicator. Clinical reagent for inorganic phosphate assay

Physical Description: Dark green cryst. powder

Solubility: Sol. H₂O, EtOH

Other Data: Forms colourless leuco-form 4,4'-Bis(dimethylamino)triphenylmethane [BJN98-P](#) on reduction

Hazard & Toxicity: LD₅₀ (rat, orl) 275 mg/kg

>>>Derivative: Oxalate

CAS Registry Number: 2437-29-8

Molecular Formula: C₂₅H₂₆N₂O₄

Molecular Weight: 418.491

Accurate Mass: 418.189258

Percentage Composition: C 71.75%; H 6.26%; N 6.69%; O 15.29%

Use/Importance: Biological stain

Aldrich: 86121-9

Sigma: M9015

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1029A, (*ir*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 438

Jankovsky, J., *Talanta*, 1959, **2**, 29, (*detn, Ga*)

Eberle, A.R. *et al.*, *Anal. Chem.*, 1967, **39**, 662, (*detn, Ta*)

Colour Index, 3rd Ed., 1971, **4**, 4380, (*synth*)

Hohenwallner, W. *et al.*, *Clin. Chim. Acta*, 1973, **45**, 169, (*detn, PO₄³⁽⁻⁾*)

Kish, P.P. *et al.*, *Zh. Anal. Khim.*, 1974, **29**, 52, (*detn, In*)

Marczenko, K. *et al.*, *Anal. Chim. Acta*, 1979, **108**, 261, (*detn, Rh*)

De, A.K. *et al.*, *Mikrochim. Acta*, 1979, **2**, 201, (*detn, Hg*)

Marczenko, Z. *et al.*, *Mikrochim. Acta*, 1983, **2**, 169, (*detn, Ir*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, AFG500; MAK600