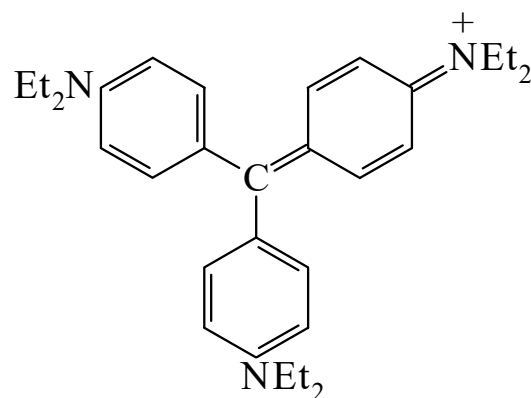




>>Entry Name: Ethyl violet

Synonym(s): *N*-[4-[Bis[4-(diethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-*N*-ethylethanaminium(1+), 9Cl. C.I. Basic violet. C.I. 42600



CAS Registry Number: 2390-59-2

Molecular Formula: $C_{31}H_{42}N_3^{(+)}$

Molecular Weight: 456.693

Accurate Mass: 456.337872

Percentage Composition: C 81.53%; H 9.27%; N 9.20%

General Statement: Strictly, the name Ethyl violet applies to the chloride

Aldrich: 22884-2

Fluka: 5025

Sigma: E4506

>>Derivative: Chloride

Molecular Formula: $C_{31}H_{42}ClN_3$

Molecular Weight: 492.146

Accurate Mass: 491.306724

Percentage Composition: C 75.66%; H 8.60%; Cl 7.20%; N 8.54%

Use/Importance: Used as 0.5mM aq. soln. for extraction-photometric detn. of B (as $BF_4^{(-)}$) (λ_{max} 610 nm, ϵ 105000, toluene), Cu (as $CuCl_2^{(-)}$) (λ_{max} 612 nm, ϵ 97000, toluene), Pb (as PbI), As(*V*)

Physical Description: Grey-violet cryst. powder

Solubility: Sol. H_2O , EtOH

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 964B, (*ir*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 325

Motomizu, S. *et al.*, *Bunseki Kagaku (Jpn. Anal.)*, 1982, **31**, 717, (*detn, As*)

Motomizu, S. *et al.*, *Analyst (London)*, 1983, **108**, 944, (*detn, As*)

Oshima, M. *et al.*, *Anal. Chem.*, 1984, **56**, 948, (*detn, B*)

Kish, P.P. *et al.*, *Zh. Anal. Khim.*, 1984, **39**, 820; 1226, (*detn, Pb*)

Yamamoto, K. *et al.*, *Analyst (London)*, 1987, **112**, 1011, (*detn, Cu*)