



CAS Registry Number: 14899-08-2
Extra CAS Registry Numbers(s): 81-88-9 509-34-2

Molecular Formula: $C_{28}H_{31}N_2O_3^{(+)}$
Molecular Weight: 443.565
Accurate Mass: 443.233468
Percentage Composition: C 75.82%; H 7.04%; N 6.32%; O 10.82%
Use/Importance: Dye with numerous uses (cosmetics, drugs, fluorescent inks, lasers, herbicide marker). Used for extraction-photometric detn. of Sb (λ_{max} 552 nm, ϵ 97000), Bi, Zn, Cd, Ga, Sn, In, Tl(III), Re, Au(III), Hg, Pd, Pt, U, Zr, $PO_4^{3(-)}$; fluorescent redox indicator
Physical Description: Violet cryst. powder (as chloride)
Solubility: Sol. H_2O , EtOH; sl. sol. Me_2CO
Other Data: Forms red aq. soln. with strong orange-yellow fluorescence
Hazard & Toxicity: LD₅₀ (mus, orl) 887 mg/kg. Weak mutagen

Aldrich: R95-3
Fluka: 83690
Sigma: R6626

>>**Derivative:** *N,N,N',N'*-Tetra-Et, Et ester
Synonym(s): 3,6-Bis(diethylamino)-9-(2-ethoxyphenyl)xanthylium(1+), 9Cl. *N*-[6-(Diethylamino)-9-[2-(ethoxycarbonyl)phenyl]-3*H*-xanthen-3-ylidene]-*N*-ethylethanaminium(1+), 9Cl. Ethylrhodamine B. C.I. 45175

CAS Registry Number: 14899-09-3
Extra CAS Registry Numbers(s): 2390-63-8

Molecular Formula: $C_{30}H_{35}N_2O_3^{(+)}$
Molecular Weight: 471.618
Accurate Mass: 471.264768
Percentage Composition: C 76.40%; H 7.48%; N 5.94%; O 10.18%
Use/Importance: Used for extraction-photometric detn. of Ta, Co, Zr
Physical Description: Red-violet cryst. (H_2O) (as chloride)

>>**Derivative:** *N,N,N',N'*-Tetra-Et, butyl ester
Synonym(s): 9-(2-Butoxycarbonylphenyl)-3,6-bis(diethylamino)xanthylium(1+), 9Cl. *N*-[9-[2-(Butoxycarbonyl)phenyl]-6-(diethylamino)-3*H*-xanthen-3-ylidene]-*N*-ethylethanaminium(1+), 9Cl. Butylrhodamine B

CAS Registry Number: 3571-37-7

Molecular Formula: $C_{32}H_{39}N_2O_3$
Molecular Weight: 499.672
Accurate Mass: 499.296068
Percentage Composition: C 76.92%; H 7.87%; N 5.61%; O 9.61%
Use/Importance: Used for extraction-photometric detn. of Sb(*I*), As(*I*), Au (ϵ 130000), Ga, In, Pb, Re, Ta, Te, U, Hg, $I^{(-)}$, $PO_4^{3(-)}$
Physical Description: Dark red-brown cryst. (as chloride)
Solubility: Sol. H_2O ; insol. C_6H_6
Other Data: CAS no. refers to chloride

References: