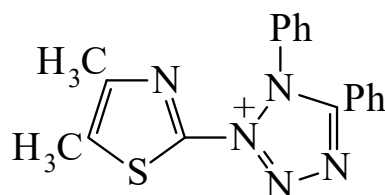




>>Entry Name: 2-(4,5-Dimethyl-2-thiazolyl)-3,5-diphenyl-2H-tetrazolium(1+), 9Cl

Synonym(s): Thiazolyl blue



CAS Registry Number: 298-93-1

Molecular Formula: $C_{18}H_{16}N_5S^{(+)}$

Molecular Weight: 334.424

Accurate Mass: 334.11264

Percentage Composition: C 64.65%; H 4.82%; N 20.94%; S 9.59%

General Statement: Strictly, the name Thiazolyl blue applies to the bromide

Fluka: 88415

Sigma: M5655

>>Derivative: Bromide

Type of Compound Code(s): PS8300 PA3550 PS7700 PM7200

Molecular Formula: $C_{18}H_{16}BrN_5S$

Molecular Weight: 414.328

Accurate Mass: 413.050976

Percentage Composition: C 52.18%; H 3.89%; Br 19.29%; N 16.90%; S 7.74%

Use/Importance: Used as 4mM aq. soln. for extraction-photometric detn. of $Re(VI)$ (λ_{max} 280 nm, forms ion associate with $ReO_4^{(-)}$, $CHCl_3$)

Physical Description: Cryst.

Solubility: Sol. H_2O

References:

Aldrich Library of ^{13}C and 1H FT NMR Spectra, 1992, **3**, 93B, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 633B, (ir)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 488

Alexandrov, A. *et al.*, *Mikrochim. Acta*, 1985, **1**, 447, (detn, Re)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DUG400