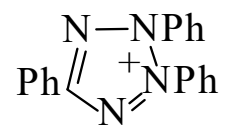




>>Entry Name: 2,3,5-Triphenyl-2*H*-tetrazolinium(1+)

Synonym(s): Tetrazolium



Molecular Formula: C₁₉H₁₅N₄⁽⁺⁾

Molecular Weight: 299.354

Accurate Mass: 299.129671

Percentage Composition: C 76.23%; H 5.05%; N 18.72%

>>Derivative: Chloride

Synonym(s): TTC. Red tetrazolium. TPTZ. RT. Vitastain. Uvoscreen

CAS Registry Number: 298-96-4

Molecular Formula: C₁₉H₁₅ClN₄

Molecular Weight: 334.807

Accurate Mass: 334.098523

Percentage Composition: C 68.16%; H 4.52%; Cl 10.59%; N 16.73%

detn. of As, Co, IO₃⁽⁻⁾. Used in detn. of reducing sugars and corticosteroids

Physical Description: Long needles (CHCl₃)

Melting Point: Mp 243 dec.°

Solubility: Insol. Et₂O; sol. alkalis

Other Data: Darkens on exp. to light

Aldrich: T8485-9

Fluka: 93140

Sigma: T4155

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 92C, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 632A, (ir)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 717

Pechmann, H. *et al.*, *Ber.*, 1894, **27**, 2920, (synth)

Kuhn, R. *et al.*, *Ber.*, 1941, **74**, 941, (synth)

Atkinson, E.H. *et al.*, *Science (Washington, D.C.)*, 1950, **111**, 385, (synth)

Hashmi, M.H. *et al.*, *Anal. Chem.*, 1964, **36**, 2471, (detn, IO₃⁽⁻⁾)

Alexandrov, A., *Mikrochim. Acta*, 1967, 579; 1972, 664, (detn, Co)

Mehra, M.C. *et al.*, *Microchem. J.*, 1979, **24**, 435

Lazarev, A.I. *et al.*, *Zavod. Lab.*, 1980, **46**, 291, (detn, As)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TMV500