



>>Entry Name: Trimethyloxonium(1+), 9Cl, 8Cl

CAS Registry Number: 43625-65-6

Me₃O⁽⁺⁾

Molecular Formula: C₃H₉O⁽⁺⁾

Molecular Weight: 61.103

Accurate Mass: 61.06534

Percentage Composition: C 58.97%; H 14.85%; O 26.18%

Use/Importance: Powerful alkylating agent

>>Derivative: Tetrafluoroborate

CAS Registry Number: 420-37-1

Molecular Formula: C₃H₉BF₄O

Molecular Weight: 147.908

Accurate Mass: 148.068257

Percentage Composition: C 24.36%; H 6.13%; B 7.31%; F 51.38%; O 10.82%

Use/Importance: Methylating agent. Used as a derivatisation reagent in anal. of haemins. Commercially available

Physical Description: Colourless cryst. (CH₂Cl₂)

Melting Point: Mp 141-143 dec.°

Solubility: Sol. CH₂Cl₂

Aldrich: 28107-7

Fluka: 92605

Sigma: T3032

>>Derivative: 2,4,6-Trinitrobenzenesulfonate

CAS Registry Number: 13700-00-0

Molecular Formula: C₉H₁₁N₃O₁₀S

Molecular Weight: 353.266

Accurate Mass: 353.016517

Percentage Composition: C 30.60%; H 3.14%; N 11.89%; O 45.29%; S 9.08%

Use/Importance: Powerful alkylating agent

Physical Description: Cryst. (EtOAc/Me₂CO)

Melting Point: Mp 115-120 dec.° (remelts at 181-183°)

References:

Pettit, D.J. *et al.*, *J.O.C.*, 1963, **28**, 2932

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, **2**, 435; 1986, **12**, 24; 1988, **13**, 327; 1980, **8**, 340; 1982, **10**, 426; 1977, **6**, 630, (*use*)

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Dean, R.T. *et al.*, *Anal. Biochem.*, 1976, **76**, 1, (*use*)

Azipura, J.M. *et al.*, *Tetrahedron*, 1985, **41**, 2903, (*use*)

Cossio, F.P. *et al.*, *Can. J. Chem.*, 1986, **69**, 225, (*use*)

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