



>>Entry Name: Tetraoctylammonium(1+), 8Cl
Synonym(s): *N,N,N*-Trioctyl-1-octanaminium(1+), 9Cl

CAS Registry Number: 19524-73-3
 $[\text{H}_3\text{C}(\text{CH}_2)_7]_4\text{N}^{(+)}$

Molecular Formula: $\text{C}_{32}\text{H}_{68}\text{N}^{(+)}$
Molecular Weight: 466.896
Accurate Mass: 466.535174
Percentage Composition: C 82.32%; H 14.68%; N 3.00%

>>Derivative: Bromide

CAS Registry Number: 14866-33-2

Molecular Formula: $\text{C}_{32}\text{H}_{68}\text{BrN}$
Molecular Weight: 546.8
Accurate Mass: 545.47351
Percentage Composition: C 70.29%; H 12.53%; Br 14.61%; N 2.56%
Use/Importance: Used as an 8% soln. in CHCl_3 for extraction-separation of Nb, Ta, Ti
Physical Description: Cryst.
Melting Point: Mp 97-98°
Solubility: Sol. common org. solvs
Aldrich: 39695-8
Fluka: 87994
Sigma: T4166

>>Derivative: Chloride

CAS Registry Number: 3125-07-3

Molecular Formula: $\text{C}_{32}\text{H}_{68}\text{ClN}$
Molecular Weight: 502.349
Accurate Mass: 501.504026
Percentage Composition: C 76.51%; H 13.64%; Cl 7.06%; N 2.79%
Use/Importance: Used for extraction-separation of As(*V*), Cr(*VI*), Pb, V(*V*), Re
Physical Description: Cryst.
Solubility: Sol. common org. solvs.
Fluka: 87991

>>Derivative: Iodide

CAS Registry Number: 16829-91-7
Molecular Formula: $\text{C}_{32}\text{H}_{68}\text{IN}$
Molecular Weight: 593.8
Accurate Mass: 593.439647
Percentage Composition: C 64.73%; H 11.54%; I 21.37%; N 2.36%
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 127-128°

References:

Eriksen, S.P. *et al.*, *J.O.C.*, 1960, **25**, 849, (*synth*)
Grimbat, N.I. *et al.*, *CA*, 1976, **84**, 80411g, (*detn, Cr, V*)
Tatarinov, V.A. *et al.*, *CA*, 1976, **84**, 80459d, (*detn, Pd*)
Pronin, V.A. *et al.*, *CA*, 1976, **85**, 167328e, (*detn, Ta, Ti, Nb*)
Ivanov, I.M. *et al.*, *CA*, 1976, **85**, 37689u, (*detn, As*)
Budesinsky, B.W. *et al.*, *Analyst (London)*, 1980, **105**, 278, (*detn, Re*)