



>>Entry Name: Decyltrimethylammonium(1+)

Synonym(s): *N,N,N*-Trimethyldecanaminium, 9Cl

CAS Registry Number: 15053-09-5

Related CAS Registry Numbers(s): 51481-78-8

$\text{H}_3\text{C}(\text{CH}_2)_8\text{CH}_2\text{N}^{(+)}\text{Me}_3$

Molecular Formula: $\text{C}_{13}\text{H}_{30}\text{N}^{(+)}$

Molecular Weight: 200.387

Accurate Mass: 200.237824

Percentage Composition: C 77.92%; H 15.09%; N 6.99%

>>Derivative: Bromide

CAS Registry Number: 2082-84-0

Molecular Formula: $\text{C}_{13}\text{H}_{30}\text{BrN}$

Molecular Weight: 280.291

Accurate Mass: 279.17616

Percentage Composition: C 55.71%; H 10.79%; Br 28.51%; N 5.00%

Melting Point: Mp 239-242° (234° dec.)

Fluka: 30725

Other: PB D01250

>>Derivative: Iodide

CAS Registry Number: 7447-24-7

Molecular Formula: $\text{C}_{13}\text{H}_{30}\text{IN}$

Molecular Weight: 327.291

Accurate Mass: 327.142297

Percentage Composition: C 47.71%; H 9.24%; I 38.77%; N 4.28%

Physical Description: Cryst. (MeOH/EtOAc)

Melting Point: Mp 200°

>>Derivative: Chloride

CAS Registry Number: 10108-87-9

Molecular Formula: $\text{C}_{13}\text{H}_{30}\text{ClN}$

Molecular Weight: 235.839

Accurate Mass: 235.206676

Percentage Composition: C 66.21%; H 12.82%; Cl 15.03%; N 5.94%

Physical Description: No phys. props. reported

References:

McDowell, M.J. *et al.*, *J.A.C.S.*, 1951, **73**, 2170, (*bromide*)

Blomquist, A.T. *et al.*, *J.A.C.S.*, 1959, **81**, 678, (*iodide*)

Hoyer, H.W., *J. Phys. Chem.*, 1961, **65**, 1807, (*iodide*)

Larsen, D.W. *et al.*, *J. Phys. Chem.*, 1971, **75**, 509-513, (*chloride, pmr, conformn*)