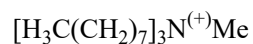




>>Entry Name: Methyltrioctylammonium(1+)

Synonym(s): *N*-Methyl-*N,N*-dioctyl-1-octanaminium(1+), 9Cl. Tricaprylylmethylammonium



Molecular Formula: $\text{C}_{25}\text{H}_{54}\text{N}^{(+)}$

Molecular Weight: 368.708

Accurate Mass: 368.425624

Percentage Composition: C 81.44%; H 14.76%; N 3.80%

Use/Importance: Phase-transfer catalyst

>>Derivative: Chloride

Synonym(s): Aliquat 336

CAS Registry Number: 5137-55-3

Molecular Formula: $\text{C}_{25}\text{H}_{54}\text{ClN}$

Molecular Weight: 404.161

Accurate Mass: 403.394476

Percentage Composition: C 74.30%; H 13.47%; Cl 8.77%; N 3.47%

Use/Importance: Liq. ion-exchanger. Used for extraction-separation of Be, Cr(*VI*), Mo, U, V, Pt, Au

Physical Description: Yellowish oil

Solubility: Sol. CHCl_3 , C_6H_6

Other Data: A commercially available reagent called Aliquat 336 is usually a mixture of methyl tri-*n*-alkylammonium chloride ($\text{C}_{27}\text{-C}_{33}$)

Aldrich: 20561-3

Sigma: M1906

>>Derivative: Bromide

CAS Registry Number: 35675-80-0

Molecular Formula: $\text{C}_{25}\text{H}_{54}\text{BrN}$

Molecular Weight: 448.612

Accurate Mass: 447.36396

Percentage Composition: C 66.93%; H 12.13%; Br 17.81%; N 3.12%

Melting Point: Mp 37-40°

References:

Woodward, C. *et al.*, *Talanta*, 1968, **15**, 321-325, (*use, Al*)

Adam, J. *et al.*, *Talanta*, 1971, **18**, 91-95, (*use, Cr*)

Hartmann, K. *et al.*, *Mikrochim. Acta*, 1978, **No. 2**, 235-246, (*synth*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1979, **7**, 380, (*use, bibl*)

Cheng, K.L. *et al.*, *Handbook of Organic Analytical Reagents*, CRC Press, Boca Raton, 1982, 479, (*use*)

Minczewski, J. *et al.*, *Separation and Preconcentration Methods in Inorganic Trace Analysis*, Horwood, Chichester, 1982

Rao, R.R. *et al.*, *Anal. Chem.*, 1983, **55**, 2320-2323, (*use*)