



>>Entry Name: Dimethyldioctylammonium(1+)

Synonym(s): *N,N*-Dimethyl-*N*-octyl-1-octanaminium, 9Cl

CAS Registry Number: 20256-55-7

$[\text{H}_3\text{C}(\text{CH}_2)_7]_2\text{N}^{(+)}\text{Me}_2$

Molecular Formula: $\text{C}_{18}\text{H}_{40}\text{N}^{(+)}$

Molecular Weight: 270.521

Accurate Mass: 270.316074

Percentage Composition: C 79.92%; H 14.90%; N 5.18%

Use/Importance: Detergent, disinfectant, wood preservative

>>Derivative: Chloride

CAS Registry Number: 5538-94-3

Molecular Formula: $\text{C}_{18}\text{H}_{40}\text{ClN}$

Molecular Weight: 305.973

Accurate Mass: 305.284926

Percentage Composition: C 70.66%; H 13.18%; Cl 11.59%; N 4.58%

Physical Description: V. hygroscopic cryst. (EtOAc)

>>Derivative: Bromide

CAS Registry Number: 3026-69-5

Molecular Formula: $\text{C}_{18}\text{H}_{40}\text{BrN}$

Molecular Weight: 350.425

Accurate Mass: 349.25441

Percentage Composition: C 61.70%; H 11.50%; Br 22.80%; N 4.00%

Melting Point: Mp 60-68°

References:

Ralston, A.W. *et al.*, *J.O.C.*, 1948, **13**, 186-190, (*chloride, synth*)

Resuggan, J.C.L., *J. Appl. Chem.*, 1951, **1**, S86-S94, (*bromide, synth*)