



>>Entry Name: Dioctylamine

Synonym(s): *N*-Octyl-1-octanamine, 9Cl

CAS Registry Number: 1120-48-5

Type of Compound Code(s): PS7700

$\text{H}_3\text{C}(\text{CH}_2)_7\text{NH}(\text{CH}_2)_7\text{CH}_3$

Molecular Formula: $\text{C}_{16}\text{H}_{35}\text{N}$

Molecular Weight: 241.459

Accurate Mass: 241.276949

Percentage Composition: C 79.59%; H 14.61%; N 5.80%

Use/Importance: Used for extraction; forms ion-pairs with anionic complexes (e.g. P-Mo-blue)

Melting Point: Mp 14-15°

Boiling Point: Bp 297-298°

Hazard & Toxicity: Irritant

Aldrich: D20114-6

Fluka: 42390

>>Derivative: Picrate

Melting Point: Mp 110-110.5°

>>Derivative: *N*-Me

CAS Registry Number: 4455-26-9

Type of Compound Code(s): PS8300 PS7700 PA4950

Molecular Formula: $\text{C}_{17}\text{H}_{37}\text{N}$

Molecular Weight: 255.486

Accurate Mass: 255.292599

Percentage Composition: C 79.92%; H 14.60%; N 5.48%

Use/Importance: Used as 5% soln. in xylene for extraction-photometric detn. of Zn (from HCl)

Physical Description: Cryst.

Solubility: Sol. xylene, toluene

Aldrich: 18377-6

Fluka: 42430

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **1**, 478B; 486B, (*nmr*)

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Schneider, H.J. *et al.*, *J.A.C.S.*, 1952, **74**, 4287, (*synth*)

Paul, J., *Anal. Chim. Acta*, 1960, **23**, 178

Andrew, T.R. *et al.*, *Analyst (London)*, 1965, **90**, 161

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