



>>Entry Name: Benzyldimethylphenylammonium(1+), 8Cl
Synonym(s): *N,N*-Dimethyl-*N*-phenylbenzenemethanaminium, 9Cl

CAS Registry Number: 22444-88-8
 $\text{PhCH}_2\text{N}^{(+)}\text{PhMe}_2$

Molecular Formula: $\text{C}_{15}\text{H}_{18}\text{N}^{(+)}$
Molecular Weight: 212.314
Accurate Mass: 212.143924
Percentage Composition: C 84.86%; H 8.54%; N 6.60%

>>Derivative: Bromide

CAS Registry Number: 23145-45-1
Molecular Formula: $\text{C}_{15}\text{H}_{18}\text{BrN}$
Molecular Weight: 292.218
Accurate Mass: 291.08226
Percentage Composition: C 61.65%; H 6.21%; Br 27.34%; N 4.79%
Physical Description: Plates (H_2O or $\text{CHCl}_3/\text{Me}_2\text{CO}$)
Melting Point: Mp 107-108 dec.°

>>Derivative: Chloride

Synonym(s): Benzyldimethylphenylammonium chloride. Leucotrope O

CAS Registry Number: 3204-68-0
Molecular Formula: $\text{C}_{15}\text{H}_{18}\text{ClN}$
Molecular Weight: 247.767
Accurate Mass: 247.112776
Percentage Composition: C 72.72%; H 7.32%; Cl 14.31%; N 5.65%
Use/Importance: Used in dyeing industry
Physical Description: Plates (H_2O or EtOH)
Melting Point: Mp 110°. Mp 116° (anhyd.)
Rare Chemicals Library: S70662-0

>>Derivative: Hydroxide

Synonym(s): Benzyldimethylphenylammonium hydroxide. Leucotrope

CAS Registry Number: 500-32-3
Molecular Formula: $\text{C}_{15}\text{H}_{19}\text{NO}$
Molecular Weight: 229.321
Accurate Mass: 229.146664
Percentage Composition: C 78.56%; H 8.35%; N 6.11%; O 6.98%
Use/Importance: Benzylating agent
Physical Description: Strongly alkaline syrup

>>Derivative: Iodide

CAS Registry Number: 25458-36-0
Molecular Formula: $\text{C}_{15}\text{H}_{18}\text{IN}$
Molecular Weight: 339.218
Accurate Mass: 339.048397
Percentage Composition: C 53.11%; H 5.35%; I 37.41%; N 4.13%
Physical Description: Prisms (H_2O or EtOH aq.)
Melting Point: Mp 164°

References:

Michler, W. *et al.*, *Ber.*, 1877, **10**, 2078, (*synth*)
Wedekind, E. *et al.*, *Ber.*, 1910, **43**, 1303, (*synth*)
Kazuo, T. *et al.*, *Chem. Pharm. Bull.*, 1967, **15**, 329, (*nmr*)