



>>Entry Name: Bephenium(1+)

Synonym(s): *N,N*-Dimethyl-*N*-(2-phenoxyethyl)benzenemethanaminium

CAS Registry Number: 7181-73-9

$\text{PhOCH}_2\text{CH}_2\text{N}^{(+)}(\text{Me})_2\text{CH}_2\text{Ph}$

Molecular Formula: $\text{C}_{17}\text{H}_{22}\text{NO}^{(+)}$

Molecular Weight: 256.367

Accurate Mass: 256.170139

Percentage Composition: C 79.65%; H 8.65%; N 5.46%; O 6.24%

>>Derivative: Bromide

Molecular Formula: $\text{C}_{17}\text{H}_{22}\text{BrNO}$

Molecular Weight: 336.271

Accurate Mass: 335.108475

Percentage Composition: C 60.72%; H 6.59%; Br 23.76%; N 4.17%; O 4.76%

Physical Description: Cryst. (2-propanol/EtOAc)

Melting Point: Mp 144.5-146°

>>Derivative: Chloride

CAS Registry Number: 13928-81-9

Molecular Formula: $\text{C}_{17}\text{H}_{22}\text{ClNO}$

Molecular Weight: 291.82

Accurate Mass: 291.138991

Percentage Composition: C 69.97%; H 7.60%; Cl 12.15%; N 4.80%; O 5.48%

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 135-136°

Hazard & Toxicity: LD₅₀ (mus, orl) 1000 mg/kg. LD₅₀ (mus, ipr) 72 mg/kg

>>Derivative: 3-Hydroxy-2-naphthoate salt (1:1)

Synonym(s): Bephenium hydroxynaphthoate, BAN, INN. Alcopar. Befeniol. Lecibis. Nemex. Many other names

CAS Registry Number: 3818-50-6

Molecular Formula: $\text{C}_{28}\text{H}_{29}\text{NO}_4$

Molecular Weight: 443.541

Accurate Mass: 443.209659

Percentage Composition: C 75.82%; H 6.59%; N 3.16%; O 14.43%

Use/Importance: Anthelmintic

Melting Point: Mp 170-171°

Sigma: B5650

>>Derivative: 4,4'-Methylenebis(3-hydroxy-2-naphthoate) salt (2:1)

Synonym(s): Bephenium embonate. Bephenium pamoate. Frantin

CAS Registry Number: 21847-63-2

Molecular Formula: $\text{C}_{57}\text{H}_{58}\text{N}_2\text{O}_8$

Molecular Weight: 899.094

Accurate Mass: 898.419318

Percentage Composition: C 76.15%; H 6.50%; N 3.12%; O 14.24%

Use/Importance: Anthelmintic

Physical Description: Pale yellow solid + 2H₂O (H₂O)

Melting Point: Mp 144-146°

References:

Burrows, R.B. *et al.*, *J. Parasitol.*, 1958, **44**, 607, (*pharmacol*)

U.K. Pat., 1959, *Wellcome*, 819 681; *CA*, **54**, 4496, (*synth*)

Marquardt, W.C. *et al.*, *J. Parasitol.*, 1960, **46**, 42, (*pharmacol*)

Bekhli, A.F. *et al.*, *CA*, 1963, **59**, 8669, (*synth*)

Martindale, The Extra Pharmacopoeia, 30th edn., *Pharmaceutical Press*, 1993, 40

Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 7th edn., *Akademie-Verlag*, 1994, 5934, (*synonyms*)