



>>>**Entry Name:** Benactyzine, BAN, INN

Synonym(s): 2-(Diethylamino)ethyl α -hydroxy- α -phenylbenzeneacetate, 9Cl. 2-(Diethylamino)ethyl benzilate, 8Cl. AY 5406-1. Many other names

CAS Registry Number: 302-40-9

$\text{Ph}_2\text{C}(\text{OH})\text{COOCH}_2\text{CH}_2\text{NEt}_2$

Molecular Formula: $\text{C}_{20}\text{H}_{25}\text{NO}_3$

Molecular Weight: 327.422

Accurate Mass: 327.183444

Percentage Composition: C 73.37%; H 7.70%; N 4.28%; O 14.66%

Use/Importance: Muscarinic receptor antagonist with antidepressant activity. NMDA receptor antagonist, anticholinergic agent

Melting Point: Mp 51°

Calculated Log P Data: Log P 3.58 (calc)

Hazard & Toxicity: LD₅₀ (rat, ims) 135 mg/kg

>>>**Derivative:** Hydrochloride

Synonym(s): Suavitil. Actozine. Amizil. Cevanol. Parasan. Tranquillin. Many other names

CAS Registry Number: 57-37-4

Physical Description: Cryst. (Me_2CO)

Melting Point: Mp 177-178° (154-155°)

Solubility: Sol. H_2O , insol. Et_2O

Hazard & Toxicity: LD₅₀ (rat, orl) 184 mg/kg. Exp. reprod. effects

Aldrich: B70-4

Sigma: B6134

>>>**Derivative:** N-Me

see Methylbenactyzium(1+), [FCV85-S](#)

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **2**, 1224C, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 283B, (ir)

Blicke, F.F., *J.A.C.S.*, 1954, **76**, 3161, (synth)

Fournier, E. *et al.*, *Therapie*, 1962, **17**, 1245, (pharmacol, tox)

Eldeson, J. *et al.*, *Arch. Int. Pharmacodyn. Ther.*, 1970, **187**, 139, (metab)

Saferstein, R. *et al.*, *J. Assoc. Off. Anal. Chem.*, 1973, **56**, 1284, (ms)

Larsson, L. *et al.*, *Acta Pharm. Suec.*, 1974, **11**, 304, (ir)

Granger, R. *et al.*, *Eur. J. Med. Chem. (Chim. Ther.)*, 1974, **9**, 404, (synth, pharmacol)

Siek, T.J. *et al.*, *J. Forensic Sci.*, 1974, **19**, 193, (uv)

Petcher, T.J., *J.C.S. Perkin 2*, 1974, 1151, (cryst struct)

Flavin, M.T. *et al.*, *J. Med. Chem.*, 1987, **30**, 278, (sar)

Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th edn., Akademie-Verlag, 1987, 5795, (synonyms)

Witkin, J.M. *et al.*, *Pharmacol., Biochem. Behav.*, 1992, **41**, 377, (pharmacol)

McDonough, J.H. *et al.*, *Pharmacol., Biochem. Behav.*, 1995, **51**, 249, (pharmacol)

Martindale, The Extra Pharmacopoeia, 31st edn., Pharmaceutical Press, 1996, 307

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 9th edn., Van Nostrand Reinhold, 1996, BCA000; DHU900