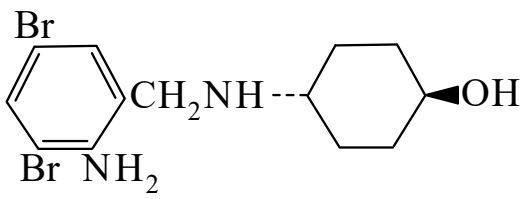
>>**Entry Name: Ambroxol,** INN
Synonym(s): 4-[[(2-Amino-3,5-dibromophenyl)methyl]amino]cyclohexanol, 9CI. NA 872



Related CAS Registry Numbers(s): 23828-92-4 96989-76-3 107814-37-9

Molecular Formula: $C_{13}H_{18}Br_2N_2O$
Molecular Weight: 378.106
Accurate Mass: 376.018585
Percentage Composition: C 41.30%; H 4.80%; Br 42.27%; N 7.41%; O 4.23%
Source/Synthesis: Metab. of Bromhexine DVS81-G
Biological Use/Importance: Expectorant. Enhances pulmonary surfactant production. Investigated for treatment of paraquat poisoning. Antioxidant props.
Calculated Log P Data: Log P 2.32 (calc)
Hazard & Toxicity: LD_{50} (rat, ipr) 380 mg/kg

>>**Variant:** (1*RS*,4*RS*)-form
Synonym(s): *trans*-form

CAS Registry Number: 18683-91-5
Molecular Formula: $C_{13}H_{18}Br_2N_2O$
Molecular Weight: 378.106
Accurate Mass: 376.018585
Percentage Composition: C 41.30%; H 4.80%; Br 42.27%; N 7.41%; O 4.23%
Sigma: A9797

>>**Derivative:** Hydrochloride
Synonym(s): Ambroxol hydrochloride, JAN. Abramen. Ambril. Ambrohexal. Ambrolitic. Amobronc. Bronchopront. Dignobroxol. Expit. Fluibron. Fluixol. Gelopol. Lindoxyl. Lisopulm. Mibrox. Motosol. Mucobron. Mucovent. Pulmonal S. Surfactal. Viscomucil. Many other names

CAS Registry Number: 15942-05-9
Melting Point: Mp 228-229°
Hazard & Toxicity: LD_{50} (rat, orl) 4203 mg/kg. LD_{50} (rat, ipr) 262 mg/kg. Exp. fetotoxic and reprod. effects

References:

Keck, J., *Annalen*, 1967, **707**, 107, *(synth)*
Renovanz, K.D., *Arzneim.-Forsch.*, 1975, **25**, 646, *(pharmacol)*
Koch, H., *Drugs of Today (Barcelona)*, 1979, **15**, 523, *(rev)*
Eur. Pat., 1985, *Heumann Ludwig*, 130 224; *CA*, **103**, 37181, *(synth)*
Disse, B.G., *Eur. J. Respir. Dis. Suppl.*, 1987, **153**, 255, *(pharmacol, rev)*
Salmona, M. *et al.*, *Food Chem. Toxicol.*, 1992, **30**, 789, *(use)*
Nobilis, M. *et al.*, *J. Chromatogr.*, 1992, **581**, 251, *(hplc)*
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, 1993, 743
Nowak, D. *et al.*, *Eur. Respir. J.*, 1994, **7**, 1629, *(pharmacol)*
Negwer, M., *Organic-Chemical Drugs and their Synonyms, 7th edn., Akademie-Verlag*, 1994, 3548
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, AHJ250; AHJ500