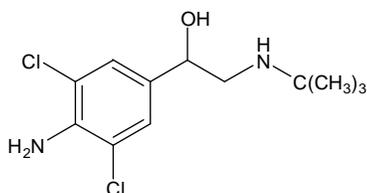


# Clenbuterol

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**CambridgeSoft**

**Monograph Number:** 2369

**Title:** Clenbuterol

**CAS Registry Number:** 37148-27-9

**CAS Name:** 4-Amino-3,5-dichloro- $\alpha$ -[[1,1-dimethylethyl)amino)methyl]benzenemethanol

**Additional Names:** 4-amino- $\alpha$ -[(*tert*-butylamino)methyl]-3,5-dichlorobenzyl alcohol

**Manufacturers' Codes:** NAB-365

**Trademarks:** Monores (Valeas)

**Molecular Formula:** C<sub>12</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>2</sub>O

**Molecular Weight:** 277.20.

**Percent Composition:** C 52.00%, H 6.55%, Cl 25.58%, N 10.11%, O 5.77%

**Literature References:** Substituted phenylethanolamine with  $\beta_2$  sympathomimetic activity. Prepn: J. Keck *et al.*, **ZA 67 05692**; *eidem*, **US 3536712** (1968, 1970 both to Thomae); *eidem*, *Arzneimittel-Forsch.* **22**, 861 (1972). Series of articles on pharmacology, reproductive toxicology, pharmacokinetics and metabolism: *ibid.* **26**, 1403-1419, 1427-1460 (1976). Toxicity: M. Ueberberg *et al.*, *ibid.* 1420. Clinical studies: M. Tschan *et al.*, *Eur. J. Clin. Pharmacol.* **15**, 159 (1979); C. Pasotti *et al.*, *Int. J. Clin. Pharmacol. Biopharm.* **17**, 176 (1979). Effect on weight gain in lambs: M. E. Nichols *et al.*, 1991 *Animal Science Research Report*, (Oklahoma Agric. Exp. Station, Oklahoma State University, 1991) 303.

**Derivative Type:** Hydrochloride

**CAS Registry Number:** 21898-19-1

**Manufacturers' Codes:** NAB-365Cl

**Trademarks:** Spiropent (Thomae; Boehringer, Ing.); Ventipulmin (Boehringer, Ing.)

**Molecular Formula:** C<sub>12</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>2</sub>O.HCl

**Molecular Weight:** 313.66.

**Percent Composition:** C 45.95%, H 6.11%, Cl 33.91%, N 8.93%, O 5.10%

**Properties:** Colorless microcrystalline powder from isopropyl alc, mp 174-175.5°. Very sol in water, methanol, ethanol, slightly sol in chloroform. Insol in benzene. LD<sub>50</sub> in mice, rats, guinea pigs (mg/kg): 176, 315, 67.1 orally; 27.6, 35.3, 12.6 i.v. (Ueberberg).

**Melting point:** mp 174-175.5°

**Toxicity data:** LD<sub>50</sub> in mice, rats, guinea pigs (mg/kg): 176, 315, 67.1 orally; 27.6, 35.3, 12.6 i.v. (Ueberberg)

**Therap-Cat:** Bronchodilator.

**Therap-Cat-Vet:** Bronchodilator; tocolytic.