darkens on exposure to air and light. Immiscible with water; miscible with most organic solvents. Store in airtight containers of glass or polyethylene, using polyethylene-lined closures. Protect from light.

Profile

Ethchlorvynol is a hypnotic and sedative with effects broadly similar to those of the barbiturates (see Amobarbital, p. 1037.2). It also has some anticonvulsant and muscle relaxant properties. It has been given for the short-term management of insomnia but has been largely superseded by other drugs.

Preparations

Pharmacopoeial Preparations
USP 36: Ethchlorvynol Capsules.

Ethyl Alpha-bromoisovalerate

Ethyl 2-Bromoisovalerate; Ethyl 2-Bromo-3-methylbutanoate; Ethyl 2-Bromo-3-methylbutyrate.
Alpha-bromoisovaleric Acid Ethyl Ester.
$C_7H_{13}BrO_2$=209.1
CAS — 609-12-1.

Profile

Ethyl alpha-bromoisovalerate has actions and uses similar to those of carbromal (p. 1044.1) but the use of bromides is generally deprecated.

Preparations

Proprietary Preparations (details are given in Volume B)

Multi-ingredient Preparations. ***Rus.***: Barboval (Барбовал); Valoserdin (Валосердин); ***Ukr.***: Barboval (Барбовал); Corvaldinum (Корвалдин); Corvaltab (Корвалтаб).

Ethyl Loflazepate *(rINN)*

CM-6912; Éthyle, Loflazépate d'; Ethylis Loflazepas; Loflazepato de etilo; Этил Лофлазепат.
Ethyl 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1*H*-1,4-benzodiazepine-3-carboxylate.
$C_{18}H_{14}ClFN_2O_3$=360.8
CAS — 29177-84-2.
ATC — N05BA18.
ATC Vet — QN05BA18.
UNII — VJB5FW9W9J.

Profile

Ethyl loflazepate is a long-acting benzodiazepine derivative with general properties similar to those of diazepam (p. 1063.2). It is used in the short-term treatment of anxiety disorders (p. 1028.1) in usual oral doses of 1 to 3 mg daily as a single dose or in divided doses.

Preparations

Proprietary Preparations (details are given in Volume B)

Single-ingredient Preparations. ***Belg.***: Victan; ***China***: Meilax (美乐适); ***Fr.***: Victan; ***Jpn***: Meilax; ***Mex.***: Victan; ***Port.***: Victan; ***Thai.***: Victan†.

Etifoxine Hydrochloride *(BANM, rINNM)*

Etifoxin Hydrochloride; Etifoxina, hidrocloruro de; Étifoxine, Chlorhydrate d'; Etifoxini Hydrochloridum; Hidrocloruro de etifoxina; Hoe-36801; Этифоксина Гидрохлорид.
6-Chloro-4-methyl-4-phenyl-3,1-benzoxazin-2-yl(ethyl)amine hydrochloride.
$C_{17}H_{17}ClN_2O$,HCl=337.2
CAS — 21715-46-8 (etifoxine); 56776-32-0 (etifoxine hydrochloride).
ATC — N05BX03.
ATC Vet — QN05BX03.
UNII — NBL8010WH5.

Profile

Etifoxine hydrochloride is an anxiolytic used for the short-term treatment of anxiety (p. 1028.1). It is given in usual oral doses of 150 or 200 mg daily in 2 or 3 divided doses.

References.
1. Nguyen N, *et al.* Efficacy of etifoxine compared to lorazepam monotherapy in the treatment of patients with adjustment disorders with anxiety: a double-blind controlled study in general practice. *Hum Psychopharmacol* 2006; **21:** 139–49. Correction. *ibid.*; 562.
2. Zeilhofer HU. Etifoxine (Stresam) for chemotherapy-induced pain? *Pain* 2009; **147:** 9–10.

Preparations

Proprietary Preparations (details are given in Volume B)

Single-ingredient Preparations. ***Fr.***: Stresam; ***Rus.***: Strezam (Стрезам); ***S.Afr.***: Stresam; ***Ukr.***: Stresam (Стрезам).

Etizolam *(rINN)*

AHR-3219; Étizolam; Etizolamum; Y-7131; Этизолам.
4-(2-Chlorophenyl)-2-ethyl-9-methyl-6*H*-thieno[3,2-*f*]-*s*-triazolo[4,3-*a*][1,4]diazepine.
$C_{17}H_{15}ClN_4S$=342.8
CAS — 40054-69-1.
ATC — N05BA19.
ATC Vet — QN05BA19.
UNII — A76XI0HIL37.

Pharmacopoeias. In *Jpn.*

Profile

Etizolam is a short-acting benzodiazepine derivative with general properties similar to those of diazepam (p. 1063.2). It is given for the short-term treatment of insomnia (p. 1033.2) and anxiety disorders (p. 1028.1) in oral doses of up to 3 mg daily in divided doses or as a single dose at night.

References.
1. Fukasawa T, *et al.* Pharmacokinetics and pharmacodynamics of etizolam are influenced by polymorphic CYP2C19 activity. *Eur J Clin Pharmacol* 2005; **61:** 791–5.
2. Kato Z, *et al.* Accidental etizolam ingestion in a child. *Pediatr Emerg Care* 2007; **23:** 472–3.
3. De Candia MP, *et al.* Effects of treatment with etizolam 0.5 mg BID on cognitive performance: a 3-week, multicenter, randomized, double-blind, placebo-controlled, two-treatment, three-period, noninferiority crossover study in patients with anxiety disorder. *Clin Ther* 2009; **31:** 2851–9.

Preparations

Proprietary Preparations (details are given in Volume B)

Single-ingredient Preparations. ***India***: Etizola; ***Ital.***: Depas; Pasaden; ***Jpn***: Depas.

Fabomotizole Hydrochloride *(pINNM)*

Afobazol; Afobazole; Aphobazole; CM-346; Fabomotizole, Chlorhydrate d'; Fabomotizoli Hydrochloridum; Hidrocloruro de fabomotizol; Obenoxazine Hydrochloride; SM-346; Афобазола Гидрохлорид; Фабомотизола Гидрохлорид.
5-Ethoxy-2-{[2-(4-morpholinyl)ethyl]thio}-1*H*-benzimidazole Monohydrochloride.
$C_{15}H_{21}N_3O_2S$,HCl=343.9
CAS — 173352-21-1 (fabomotizole); 173352-39-1 (fabomotizole monohydrochloride).
UNII — HDO6HX6NZU.

NOTE. Afobazol is a registered trade mark in some countries and may be used to describe the dihydrochloride.

Profile

Fabomotizole is a non-benzodiazepine anxiolytic used in the treatment of anxiety disorders (p. 1028.1). It has been given orally as the dihydrochloride in a usual dose of 10 mg three times daily. A maximum of 60 mg may be given daily.

References.
1. Neznamov GG, *et al.* Aphobazol—new selective anxyolytic drug. *Zh Nevrol Psikhiatr Im S S Korsakova* 2005; **105:** 35–40.
2. Medvedev VE, *et al.* Psychopharmacotherapy of anxiety disorders in patients with cardio-vascular diseases: the use of aphobazole. *Zh Nevrol Psikhiatr Im S S Korsakova* 2007; **107:** 25–9.

Fluanisone *(BAN, rINN)*

Fluanison; Fluanisona; Fluanisoni; Fluanisonum; Haloanisone; MD-2028; R-2028; R-2167; Флуанизон.
4′-Fluoro-4-[4-(2-methoxyphenyl)piperazin-1-yl]butyrophenone.
$C_{21}H_{25}FN_2O_2$=356.4
CAS — 1480-19-9.
ATC — N05AD09.
ATC Vet — QN05AD09.
UNII — 1D0W98U1I4.

Pharmacopoeias. In *BP(Vet)*.

BP(Vet) 2014: (Fluanisone). White or almost white to buff-coloured, odourless or almost odourless crystals or powder. It exhibits polymorphism. M.p. 72 degrees to 76 degrees. Practically insoluble in water; freely soluble in alcohol, in chloroform, in ether, and in dilute solutions of organic acids. Protect from light.

Profile

Fluanisone is a butyrophenone with general properties similar to those of haloperidol (p. 1077.1). It has been used in the management of agitated states in psychiatric patients and as anaesthetic premedication.

Fluanisone is used in veterinary medicine for neuroleptanalgesia.

Fludiazepam *(rINN)*

Fludiazépam; Fludiazepamum; ID-540; Флудиазепам.
7-Chloro-5-(2-fluorophenyl)-1,3-dihydro-1-methyl-2*H*-1,4-benzodiazepin-2-one.
$C_{16}H_{12}ClFN_2O$=302.7
CAS — 3900-31-0.
ATC — N05BA17.
ATC Vet — QN05BA17.
UNII — 7F64A2K16Z.

Pharmacopoeias. In *Jpn.*

Profile

Fludiazepam is a short-acting benzodiazepine with general properties similar to those of diazepam (p. 1063.2). It has been given in the short-term treatment of anxiety disorders (p. 1028.1) in a usual oral dose of 250 micrograms three times daily.

Preparations

Proprietary Preparations (details are given in Volume B)

Single-ingredient Preparations. ***Jpn***: Erispan.

Flunitrazepam *(BAN, USAN, rINN)*

Flunitratsepaami; Flunitrazepám; Flunitrazépam; Flunitrazepamas; Flunitrazepamum; Ro-5-4200; Флунитразепам.
5-(2-Fluorophenyl)-1,3-dihydro-1-methyl-7-nitro-1,4-benzodiazepin-2-one.
$C_{16}H_{12}FN_3O_3$=313.3
CAS — 1622-62-4.
ATC — N05CD03.
ATC Vet — QN05CD03.
UNII — 620X0222FQ.

Street names. The following terms have been used as 'street names' (see p. vii) or slang names for various forms of flunitrazepam:

Benzo; Circles; Date rape drug; Forget me drug; Forget pill; Forget-me pill; Forget-Me-Pill; Getting roached; La Rocha; La Roche; Lunch money drug; Mexican valium; Pingus; R2; R-2; Reynolds; Rib; Rick James Biatch; Roach; Roach 2; Roach-2; Roaches; Roachies; Roapies; Robutal; Rochas dos; Roche; Roches; Rolpes; Roofie; Roofies; Roopies; Rope; Rophies; Rophy; Ropies; Roples; Ropples; Row-shay; Ruffies; Ruffles; Sedexes; Wolfies.

Pharmacopoeias. In *Eur.* (see p. vii) and *Jpn.*

Ph. Eur. 8: (Flunitrazepam). A white or yellowish crystalline powder. Practically insoluble in water; slightly soluble in alcohol; soluble in acetone. Protect from light.

Uses and Administration

Flunitrazepam is an intermediate- or short-acting benzodiazepine (depending on dose) with general properties similar to those of diazepam (p. 1063.3). It is used in the short-term management of insomnia (p. 1033.2), as a premedicant in surgical procedures, and for induction of anaesthesia (p. 1899.1).

A usual oral dose for **insomnia** is 0.5 to 1 mg at night; up to 2 mg may be given if necessary. In elderly or debilitated patients the initial dose should not exceed 500 micrograms at night; up to 1 mg may be given if necessary.

A dose of 1 to 2 mg (15 to 30 micrograms/kg) has been given intramuscularly or orally for **premedication** or by slow intravenous injection for **induction** of general anaesthesia.

Dependence and Withdrawal

As for Diazepam, p. 1065.1.

Adverse Effects, Treatment, and Precautions

As for Diazepam, p. 1065.3.

Abuse. A WHO review[1] concluded that flunitrazepam had a moderate abuse potential that might be higher than that of other benzodiazepines. It was reported that there was current evidence of widespread abuse of flunitrazepam among drug abusers, particularly among those who used opioids or cocaine. Flunitrazepam has also been abused at social gatherings where it is taken orally or intranasally.[2,3]

Flunitrazepam is tasteless and odourless and has been misused to incapacitate the victim and produce amnesia in sexual assaults and drug-facilitated rape ('date rape').[2-4] A 1-