

For a discussion of the caution needed when using azole antifungals during pregnancy, see under Pregnancy in Precautions of Fluconazole, p.532.

#### ◊ References.

1. del Palacio A, et al. A double-blind randomized comparative trial: econazole 1% cream versus clotrimazole 1% cream twice daily in Candida and dermatophyte skin infections. *Mycoses* 2001; **44**: 173-80.
2. Repisa Montero T, et al. Econazole 1% cream is an effective and safe alternative for dermatophytosis treatment: multicenter, randomized, double-blind, comparative trial with miconazole 2% cream. *Int J Dermatol* 2006; **45**: 600-4.

#### Preparations

##### Proprietary Preparations (details are given in Part 3)

**Spain:** Ebenet; Ebertop; Ebespol.

#### Econazole (BAN, USAN, rINN)

Econazol; Éconazole; Econazolum; Ekonatsoli; Ekonazol; Ekonazol. 1-[2,4-Dichloro- $\beta$ -(4-chlorobenzoyloxy)phenethyl]imidazole.

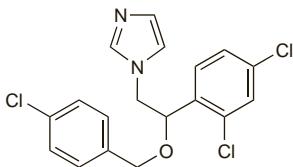
Эконазол

$C_{18}H_{15}Cl_3N_2O = 381.7$

CAS — 27220-47-9.

ATC — D01AC03; G01AF05.

ATC Vet — QD01AC03; QG01AF05.



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

**Ph. Eur. 6.2** (Econazole). A white or almost white powder. M.p. 88° to 92°. Practically insoluble in water; very soluble in alcohol and in dichloromethane. Protect from light.

#### Econazole Nitrate (BANM, USAN, rINNM)

C-C2470; Éconazole, nitrate d'; Econazol nitrás; Ekonatsolini-tratti; Ekonazolnitrát; Ekonazolo nitratas; Nitrato de econazole; R-14827; SQ-13050. ( $\pm$ )-1-[2,4-Dichloro- $\beta$ -(4-chlorobenzoyloxy)phenethyl]imidazole nitrate.

Эконазола Нитрат

$C_{18}H_{15}Cl_3N_2O.HNO_3 = 444.7$

CAS — 24169-02-6 (econazole nitrate); 68797-31-9 (( $\pm$ )-econazole nitrate).

ATC — D01AC03; G01AF05.

ATC Vet — QD01AC03; QG01AF05.

**Pharmacopoeias.** In Chin., Eur. (see p.vii), and US.

**Ph. Eur. 6.2** (Econazole Nitrate). A white or almost white crystalline powder. Very slightly soluble in water; slightly soluble in alcohol; sparingly soluble in dichloromethane; soluble in methyl alcohol. Protect from light.

**USP 31** (Econazole Nitrate). A white or practically white, crystalline powder, with not more than a slight odour. Very slightly soluble in water and in ether; slightly soluble in alcohol; sparingly soluble in chloroform; soluble in methyl alcohol. Protect from light.

#### Adverse Effects and Precautions

Local reactions including burning and irritation may occur when econazole nitrate is applied topically. Contact dermatitis has been reported rarely.

Intravaginal preparations of econazole may damage latex contraceptives and additional contraceptive measures are therefore necessary during local application.

For a discussion of the caution needed when using azole antifungals during pregnancy, see under Pregnancy in Precautions of Fluconazole, p.532.

**Porphyria.** Econazole nitrate has been associated with acute attacks of porphyria and is considered unsafe in porphyric patients.

#### Antimicrobial Action

Econazole is an imidazole antifungal with antimicrobial activity similar to that of ketoconazole (p.539).

#### Pharmacokinetics

Absorption is not significant when econazole nitrate is applied to the skin or vagina.

#### Uses and Administration

Econazole is an imidazole antifungal used topically in the treatment of superficial candidiasis (see p.518) and in dermatophytosis and pityriasis versicolor (see Skin Infections, p.521).

Econazole nitrate is applied topically up to 3 times daily as a 1% cream, lotion, powder, or solution in the treatment of fungal skin infections. Treatment is continued for 2 to 4 weeks. It is also used in the treatment of vaginal candidiasis as pessaries of 150 mg once daily at bedtime for 3 consecutive nights; a single dose of 150 mg in a long-acting formulation has also been used. Intravaginal use of 5 g of a 1% cream once daily at night has been given for 2 weeks. A 1% cream may be used concurrently for the treatment of vulval infections or for the treatment of balanitis in a male partner.

In the treatment of fungal infections of the nails, a 1% cream or lotion is applied once daily and covered with an occlusive dressing.

Econazole nitrate has also been used as eye or ear drops.

Econazole sulfosalicylate has also been used.

#### Preparations

##### BP 2008: Econazole Cream; Econazole Pessaries.

##### Proprietary Preparations (details are given in Part 3)

**Arg.:** Dermocitran; Micicide; Micofitex<sup>†</sup>; Micos; Micotex; Novo Paramicon; Sinamida Econazol; **Austria:** Dermazole; Pevaryl; **Austria:** Gyno-Pevaryl; Pevaryl; **Belg.:** Gyno-Pevaryl; Pevaryl; **Braz.:** Dermazol; Micosty; **Canad.:** Ecostatin; **Chile:** Micos; **Cz.:** Gyno-Pevaryl; Pevaryl; **Denn.:** Pevaryl; **Fin.:** Pevaryl; **Fr.:** Dermazol; Fongeryl; Gyno-Pevaryl; Mycicapaisyl; Pevaryl; **Ger.:** Epi-Pevaryl; Epi-Pevaryl Pv; Gyno-Pevaryl; **Gr.:** Bismultin; Mycobacter; Nectarmicint; Penicome; Pevaryl; Unifungin; **Hong Kong:** Dermazol; Epi-Pevaryl; Ecosone; Gyno-Pevaryl<sup>†</sup>; Head's Shampoo; Pevaryl<sup>†</sup>; **Hung.:** Gyno-Pevaryl; Pevaryl; **India:** Econol; **Irl.:** Ecostatin; Gyno-Pevaryl; Pevaryl; **Israel:** Gyno-Pevaryl; Pevaryl; **Ital.:** Chemionazol<sup>†</sup>; Dermazol<sup>†</sup>; Eccelium<sup>†</sup>; Eco-M; Ecoderm; Ecoderm-C; Gyno-Pevaryl; Pevaryl; **Malaysia:** Ecoderm; Ecoderm<sup>†</sup>; Gyno-Pevaryl; Pevaryl; Polinazolo; **Malaysia:** Ecoderm<sup>†</sup>; Gyno-Pevaryl; Pevaryl<sup>†</sup>; Zoliderm<sup>†</sup>; **Mex.:** Micosty; Pevaryl; **Neth.:** Pevaryl; **Norw.:** Pevaryl; **NZ:** Dermazole<sup>†</sup>; Ecreme; Gyno-Pevaryl<sup>†</sup>; Pevaryl; **Philip.:** Pevaryl; **Pol.:** Gyno-Pevaryl; Pevaryl; Pevaryl; Pevaryl; **Port.:** Gyno-Pevaryl; Pevaryl; **Rus.:** Ecalin (Экалин); Ecodax (Экодакс); Ecomikole (Экомиколе)<sup>†</sup>; Gyno-Pevaryl (Гино-Певарил); Ifeneç (Ифенэç); **S.Afr.:** Ecoderm; Econal-C; Gyno-Pevaryl; Pevaryl; **Singapore:** Dermazol<sup>†</sup>; Gyno-Pevaryl; Pevaryl<sup>†</sup>; **Spain:** Ecotam; Gyno-Pevaryl; Pevaryl; Sebolith; **Thail.:** Econ; **UK:** Ecostatin; Gyno-Pevaryl; Pevaryl; **USA:** Spectazole; **Ven.:** Gyno-Pevaryl; Gynomicron<sup>†</sup>; Miconax; Mizolet<sup>†</sup>; Pevaryl.

**Multi-ingredient:** **Arg.:** Difunazol<sup>†</sup>; Filoderma Plus; Griseocrem; Griseoplus; Novo Bacticort Complex<sup>†</sup>; **Austria:** Pevaryl; Pevisone; **Belg.:** Pevisone; **Fin.:** Pevisone; **Fr.:** Pevisone; **Ger.:** Epi-Pevaryl Heelpaste<sup>†</sup>; Epiprevione; **Gr.:** Pevisone; **Hong Kong:** Pevisone; Tricozole; **India:** Cobederm-H; Ecodax<sup>†</sup>; **Israel:** Pevisone; **Malaysia:** Ecocort; Econazine; Pevisone<sup>†</sup>; **Norw.:** Pevisone; **Philip.:** Nizolex; Pevaryl; HP; Pevisone; **Pol.:** Pevisone; **Port.:** Pevisone; **S.Afr.:** Pevisone; **Singapore:** Ecocort; Econazine; Pevisone<sup>†</sup>; **Swed.:** Pevisone; **Switz.:** Pevaryl; Pevaryl; Pevisone; **Thail.:** Ecocort; Ecoderm; Pevisone<sup>†</sup>; Tricazole; **UK:** Econacort.

#### Enilconazole (BAN, USAN, rINN)

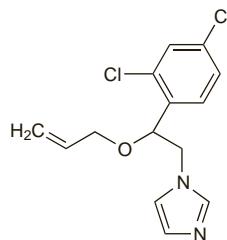
Enilconazol; Énilconazole; Enilconazolum; Enilkonatsoli; Enilkonzol; R-23979. ( $\pm$ )-1-( $\beta$ -Allyloxy-2,4-dichlorophenethyl)imidazole.

Энликоназол

$C_{14}H_{14}Cl_2N_2O = 297.2$

CAS — 35554-44-0.

ATC Vet — QD01AC09.



**Pharmacopoeias.** In Eur. (see p.vii) for veterinary use only.

**Ph. Eur. 6.2** (Enilconazole for Veterinary Use; Enilconazole BP(Vet) 2008). A clear, yellowish, oily liquid or solid mass. Very slightly soluble in water; freely soluble in alcohol, in methyl alcohol, and in toluene. Store in airtight containers. Protect from light.

#### Profile

Enilconazole is an imidazole antifungal used topically in veterinary medicine for the treatment of fungal skin infections in cattle, horses, and dogs. It is also used by inhalation for the treatment of aspergillosis in ostriches.

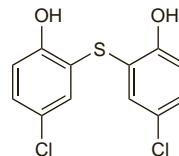
#### Fenticonazole (BAN, USAN, rINN)

D-25; Fenticlor; Fenticlorum; HL-1050; NSC-4112; Ph-549; S-7, 2,2'-Thiobis(4-chlorophenol).

Фентиклор

$C_{12}H_8Cl_2O_2S = 287.2$ .

CAS — 97-24-5.



#### Profile

Fenticonazole is an antifungal that has been applied topically in the treatment of dermatophyte infections.

Photosensitivity reactions have been reported.

#### Preparations

##### Proprietary Preparations (details are given in Part 3)

**Multi-ingredient:** **Spain:** Dermisdin<sup>†</sup>.

#### Fenticonazole Nitrate (BANM, USAN, rINNM)

Fenticonazole, nitrate de; Fenticonazol nitrás; Fentikonatsolin-tratti; Fentikonazolnitrat; Fentikonazol-nitrát; Fentikonazolo nitratas; Nitrato de fenticonazol; Rec-15/1476. ( $\pm$ )-1-[2,4-Dichloro- $\beta$ -[ $\beta$ -(phenylthio)benzyl]oxy]phenethyl]imidazole mononitrate.

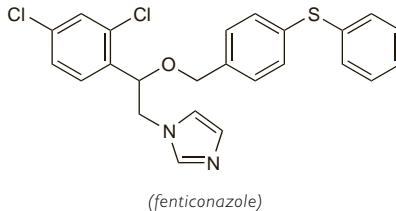
Фентиконазола Нитрат

$C_{24}H_{20}Cl_2N_2OS.HNO_3 = 518.4$ .

CAS — 72479-26-6 (fenticonazole); 73151-29-8 (fenticonazole nitrate).

ATC — D01AC12; G01AF12.

ATC Vet — QD01AC12; QG01AF12.



(fenticonazole)

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

**Ph. Eur. 6.2** (Fenticonazole Nitrate). A white or almost white, crystalline powder. Practically insoluble in water; sparingly soluble in dehydrated alcohol; freely soluble in dimethylformamide and in methyl alcohol. Protect from light.

#### Adverse Effects and Precautions

Burning and itching have been reported after the application of fenticonazole nitrate.

Intravaginal preparations of fenticonazole may damage latex contraceptives and additional contraceptive measures are therefore necessary during local application.

For a discussion of the caution needed when using azole antifungals during pregnancy, see under Pregnancy in Precautions of Fluconazole, p.532.

#### Antimicrobial Action

Fenticonazole is an imidazole antifungal active against a range of organisms including dermatophyte pathogens, *Malassezia furfur*, and *Candida albicans*.

#### Uses and Administration

Fenticonazole is an imidazole antifungal used locally as the nitrate in the treatment of vulvovaginal candidiasis (p.518). A 200-mg pessary is inserted into the vagina at bedtime for 3 nights or a 600-mg pessary is inserted once only at bedtime. Fenticonazole nitrate is also applied topically as a 2% cream or solution for the treatment of fungal skin infections.

#### Preparations

##### Proprietary Preparations (details are given in Part 3)

**Arg.:** Lomexin<sup>†</sup>; **Austria:** Lomexin; **Braz.:** Fentizol; Lomexin; **Cz.:** Lomexin; **Fr.:** Lomexin; Terlomexin; **Ger.:** Fenizolan; Lomexin; **Gr.:** Lomexin; **Hung.:** Gynoxin; **Ital.:** Falvin; Fentiderm<sup>†</sup>; Fentigyn<sup>†</sup>; Lomexin; **Max.:** Lomexin; **Neth.:** Gynoxin; **Pol.:** Gynoxin; **Port.:** Lomexin; **S.Afr.:** Lomexin<sup>†</sup>; **Singapore:** Lomexin<sup>†</sup>; **Spain:** Laurimic; Lomexin; Micofulvin; **Switz.:** Mycodermil; **Turk.:** Gyno-Lomexin; **UK:** Lomexin<sup>†</sup>; **Venez.:** Mycofentin.