

**Eprozinol Hydrochloride** (rINN/M)

Éprozinol; Chlorhydrate d'; Eprozinoli Hydrochloridum; Hidrocloruro de eprozinol. 3-[4-( $\beta$ -Methoxyphenyl)piperazin-1-yl]-l-phenylpropan-1-ol dihydrochloride.

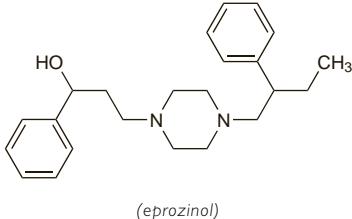
Эпразинола Гидрохлорид

$C_{22}H_{30}N_2O_2 \cdot 2HCl = 427.4$ .

CAS — 32665-36-4 (eprozinol).

ATC — R03DX02.

ATC Vet — QR03DX02.

**Profile**

Eprozinol hydrochloride has been given orally for its mucolytic or expectorant properties.

**Adverse effects.** Convulsions and coma were reported in a 19-year-old patient after taking eprozinol.<sup>1</sup>

1. Merigot P, et al. Les convulsions avec trois antitussifs dérivés substitués de la pipérazine: (zipéprrol, éprazinone, éprozinol). *Ann Pediatr (Paris)* 1985; **32**: 504-11.

**Preparations**

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

Fr.: Eupneron®.

**Erdosteine** (rINN)

Erdosteini; Erdostein; Erdosteína; Erdostéine; Erdosteinem. ( $\pm$ )-{[(Tetrahydro-2-oxo-3-thienyl)carbamoyl]methyl}thio)acetic acid id.

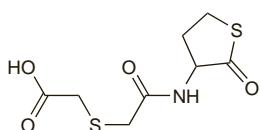
Эрдостеин

$C_8H_{11}NO_4S_2 = 249.3$ .

CAS — 84611-23-4.

ATC — R05CB15.

ATC Vet — QR05CB15.

**Adverse Effects and Precautions**

Gastrointestinal disturbances may occur with erdosteine. Headache, dyspnoea, taste alterations, urticaria, erythema, and dermatitis have been reported rarely. Licensed product information for erdosteine suggests that it should not be used in patients with active peptic ulcer disease.

**Pharmacokinetics**

Erdosteine is rapidly absorbed after oral use; absorption is unaffected by food. Peak plasma concentrations are reached after about an hour. Erdosteine undergoes first-pass metabolism to an active metabolite, N-thiodiglycolyl-homocysteine. Plasma protein binding is about 64.5%. The elimination half-life is about 1.46 hours for erdosteine, and about 1.62 hours for the metabolite. Excretion is mainly via the urine, as metabolites; faecal elimination is negligible.

**Uses and Administration**

Erdosteine is a mucolytic that is used in the treatment of disorders of the respiratory tract characterised by productive cough (p.1547). It is given in usual oral doses of 300 mg twice daily for a maximum of 10 days.

**Administration in hepatic and renal impairment.** Exposure to erdosteine is increased in patients with hepatic impairment. UK licensed product information states that no increase in adverse effects has been observed in patients with mild liver failure, but restricts the dose in these patients to a maximum of 300 mg daily by mouth. Erdosteine is contra-indicated in severe hepatic impairment.

Although no difference in absorption or elimination has been seen in patients with moderate renal impairment, the risk of accumulation of metabolites cannot be excluded. For this reason, use of erdosteine is contra-indicated in patients with a creatinine clearance of less than 25 mL/minute.

**Chronic obstructive pulmonary disease.** Erdosteine has been used<sup>1-3</sup> in the management of chronic obstructive pulmonary disease (p.1112) but the value of mucolytics in this disorder is controversial.

1. Dechant KL, Noble S. Erdosteine. *Drugs* 1996; **52**: 875-81.
2. Marchioni CF, et al. Evaluation of efficacy and safety of erdosteine in patients affected by chronic bronchitis during an infective exacerbation phase and receiving amoxicillin as basic treatment (ECOBES, European Chronic Obstructive Bronchitis Erdosteine Study). *Int J Clin Pharmacol Ther* 1995; **33**: 612-18.
3. Moretti M, et al. The effect of long-term treatment with erdosteine on chronic obstructive pulmonary disease: the EQUAL-IFE Study. *Drugs Exp Clin Res* 2004; **30**: 143-52.

**Preparations**

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

Arg.: Amuctolf†; Fluidasa; Austria: Erdomed; Belg.: Mucotherapie; Braz.: Erdotin†; Flusten; Chile: Biopulmin; Cz.: Erdomed; Denm.: Erdotin; Fin.: Erdopect; Fr.: Edire†; Vectrine; Gr.: Theovix; Tusselin; Hung.: Erdotin; Indon.: Vectrine; Ital.: Erdotin; Mex.: Dostein; Esteclin; Philipp.: Ectrin; Port.: Erdotin; Switz.: Mucofar; Turk.: Erdostin; UK: Erdotin.

**Multi-ingredient:** Mex.: Esteclin Bac.

**Profile**

Ethyl cysteine hydrochloride is a mucolytic that has been used in the treatment of disorders of the respiratory tract associated with productive cough.

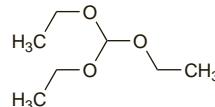
**Ethyl Orthoformate**

Ether de Kay; Triethoxymethane; Trietoximetano. Triethyl orthoformate.

Этиловый Эфир Ортомуравиной Кислоты

$C_7H_{16}O_3 = 148.2$ .

CAS — 122-51-0.



**Pharmacopoeias.** In Fr.

**Profile**

Ethyl orthoformate is a cough suppressant (see p.1547). It is reported to be a respiratory antispasmodic and has been given by mouth or rectally.

**Fedrilate** (rINN)

Fédrilate; Fedrilato; Fedrilatum; UCB-3928. 1-Methyl-3-morpholinopropyl perhydro-4-phenylpyran-4-carboxylate.

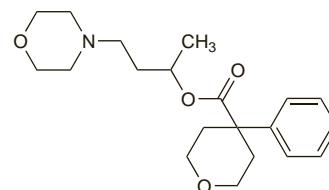
Федрилат

$C_{20}H_{29}NO_4 = 347.4$ .

CAS — 23271-74-1.

ATC — R05DB14.

ATC Vet — QR05DB14.

**Profile**

Fedrilate is a cough suppressant used orally for non-productive cough.

**Preparations**

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

Braz.: Gotas Binelli.

**Fenoxazoline Hydrochloride** (rINNM) ⊗

Fénoxazoline, Chlorhydrate de; Fenoxazolini Hydrochloridum; Hidrocloruro de fenoxazolina. 2-(Isopropylphenoxy)methyl-imidazoline hydrochloride.

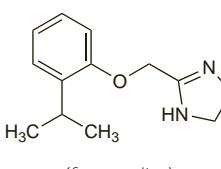
Феноксазолина Гидрохлорид

$C_{13}H_{18}N_2O_2 \cdot HCl = 254.8$ .

CAS — 4846-91-7 (fenoxazoline); 21370-21-8 (fenoxazoline hydrochloride).

ATC — R01AA12.

ATC Vet — QR01AA12.

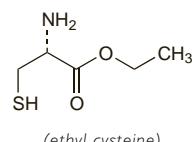
**Profile**

Fenoxazoline hydrochloride is a sympathomimetic with effects similar to those of naphazoline (p.1565) that has been used topically for its vasoconstrictor properties in the symptomatic treatment of nasal congestion.

**Preparations**

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

Arg.: Nebulicida; Braz.: Aturgyl†; Nasofelin.



**Pharmacopoeias.** In Jpn.