Cetiedil Citrate *(USAN, rINNM)*

Cétiédil, Citrate de; Cetiedili Citras; Citrato de cetiedil. 2-(Perhydroazepin-1-yl)ethyl α-cyclohexyl-α-(3-thienyl)acetate dihydrogen citrate monohydrate.

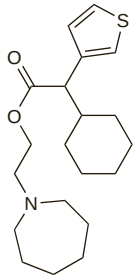
Цетиедила Цитрат

$C_{20}H_{31}NO_2S,C_6H_8O_7,H_2O$ = 559.7.

CAS — 14176-10-4 (cetiedil); 16286-69-4 (anhydrous cetiedil citrate).

ATC — C04AX26.

ATC Vet — QC04AX26.



(cetiedil)

Profile

Cetiedil citrate is a vasodilator with antimuscarinic activity that has been used in the management of peripheral vascular disease.

Chlorothiazide *(BAN, rINN)* ⊗

Chlorothiazid; Chlorothiazidum; Chlorotiazidas; Chlorotiazyd; Clorotiazida; Klooritiatsidi; Klorotiazid; Klortiazid. 6-Chloro-2*H*-1,2,4-benzothiadiazine-7-sulphonamide 1,1-dioxide.

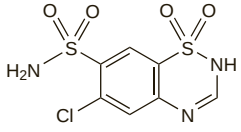
Хлоротиазид

$C_7H_6ClN_3O_4S_2$ = 295.7.

CAS — 58-94-6.

ATC — C03AA04.

ATC Vet — QC03AA04.



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

Ph. Eur. 6.2 (Chlorothiazide). A white or almost white crystalline powder. Very slightly soluble in water; slightly soluble in alcohol; sparingly soluble in acetone. It dissolves in dilute solutions of alkali hydroxides.

USP 31 (Chlorothiazide). A white or practically white, odourless, crystalline powder. Very slightly soluble in water; practically insoluble in chloroform, in ether, and in benzene; freely soluble in dimethylformamide and dimethyl sulfoxide; slightly soluble in methyl alcohol and in pyridine. Store at a temperature of 25°, excursions permitted between 15° and 30°.

Stability. Alkaline solutions undergo decomposition due to hydrolysis upon standing or heating.

Chlorothiazide Sodium *(BANM, USAN, rINNM)* ⊗

Chlorothiazide Sodique; Clorotiazida sódica; Natrii Chlorothiazidum; Sodium Chlorothiazide.

Натрий Хлоротиазид

$C_7H_5ClN_3NaO_4S_2$ = 317.7.

CAS — 7085-44-1.

ATC — C03AA04.

ATC Vet — QC03AA04.

Pharmacopoeias. *US* includes Chlorothiazide Sodium for Injection.

Incompatibility. The alkaline nature of chlorothiazide in injectable form suggests that incompatibilities with acidic drugs could be expected; US licensed product information states that the injection may be diluted with glucose or sodium chloride solutions.

Adverse Effects, Treatment, and Precautions

As for Hydrochlorothiazide, p.1307. Chlorothiazide sodium injection is alkaline: when giving chlorothiazide by intravenous infusion, care should be taken to ensure that extravasation does not occur.

Breast feeding. Chlorothiazide is distributed into breast milk in small amounts. A single 500-mg oral dose of chlorothiazide was given[1] to 11 lactating women and blood and milk samples taken after 1, 2, and 3 hours; all the samples had concentrations below 1 microgram/mL and it was calculated that an infant would receive no more than 1 mg of drug each day. The American Academy of Pediatrics states that no adverse effects have been seen in infants and therefore considers[2] that chlorothiazide is usually compatible with breast feeding.

1. Werthmann MW, Krees SV. Excretion of chlorothiazide in human breast milk. *J Pediatr* 1972; **81:** 781–3.
2. American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001; **108:** 776–89. Correction. *ibid.*; 1029. Also available at: http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776 (accessed 06/07/04)

Interactions

As for Hydrochlorothiazide, p.1309.

Pharmacokinetics

Chlorothiazide is incompletely and variably absorbed from the gastrointestinal tract. It has been estimated to have a plasma half-life of 45 to 120 minutes although the clinical effects may last for up to about 12 hours. It is excreted unchanged in the urine. Chlorothiazide crosses the placental barrier and small amounts are reported to be distributed into breast milk.

Uses and Administration

Chlorothiazide is a thiazide diuretic with actions and uses similar to those of hydrochlorothiazide (p.1310). It is used for oedema, including that associated with heart failure (p.1165), and for hypertension (p.1171).

After oral doses of chlorothiazide diuresis usually occurs in about 2 hours, reaches a maximum at about 4 hours, and is maintained for 6 to 12 hours.

In the treatment of **oedema** the usual dose of chlorothiazide is 0.25 to 1 g orally once or twice daily; therapy on alternate days or on 3 to 5 days weekly may be adequate. The dose should not normally exceed 2 g daily.

In the treatment of **hypertension** the usual initial dose is 250 to 500 mg daily orally, given as a single or divided dose. A dose of 125 mg may be adequate in some patients. Patients may rarely require up to 1 g daily.

For the use of chlorothiazide in children, see below.

Chlorothiazide has also been given intravenously as the sodium salt, in doses similar to those given orally. Chlorothiazide sodium 537 mg is equivalent to about 500 mg of chlorothiazide. It is not suitable for subcutaneous or intramuscular injection and extravasation should be avoided. The diuretic effect lasts for up to 2 hours after intravenous injection.

Administration in children. Chlorothiazide may be used in children for the management of *heart failure* or *hypertension*. Usual oral doses are as follows:

- neonates and infants aged 1 to 6 months: 10 to 20 mg/kg twice daily
- age 6 months to 12 years: 10 mg/kg twice daily, to a maximum of 1 g daily
- age 12 to 18 years: 0.25 to 1 g once daily or 125 to 500 mg twice daily

For *diabetes insipidus* in children, the *BNFC* suggests an oral dose of 10 to 20 mg/kg twice daily, to a maximum of 1 g daily.

Chlorothiazide also has a hyperglycaemic effect and has been used in children with *chronic hypoglycaemia* (see under Uses of Glucagon, p.1447). It is usually given with diazoxide and has the added benefit of reducing diazoxide-associated sodium and water retention. The *BNFC* suggests an oral dose of 3 to 5 mg/kg twice daily.

Preparations

USP 31: Chlorothiazide Oral Suspension; Chlorothiazide Sodium for Injection; Chlorothiazide Tablets; Methyldopa and Chlorothiazide Tablets; Reserpine and Chlorothiazide Tablets.

Proprietary Preparations (details are given in Part 3)

Singapore: Chlorzide†; ***USA:*** Diurigen; Diuril.

Multi-ingredient: ***Canad.:*** Supres†; ***Gr.:*** Neourizine; ***USA:*** Aldoclor; Diupres.

Chlortalidone *(BAN, rINN)* ⊗

Chlorotalidon; Chlortalidon; Chlortalidonas; Chlortalidonum; Chlorthalidone *(USAN)*; Clorotalidona; Clortalidona; G-33182; Klooritaldoni; Klórtalidon; Klortalidon; NSC-69200. 2-Chloro-5-(1-hydroxy-3-oxoisoindolin-1-yl)benzenesulphonamide

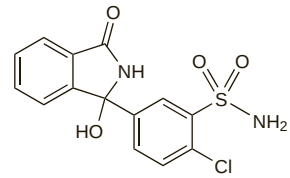
Хлорталидон

$C_{14}H_{11}ClN_2O_4S$ = 338.8.

CAS — 77-36-1.

ATC — C03BA04.

ATC Vet — QC03BA04.



NOTE. Compounded preparations of chlortalidone may be represented by the following names:

- Co-tenidone (*BAN*)—chlortalidone 1 part and atenolol 4 parts (w/w).

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

Ph. Eur. 6.2 (Chlortalidone). A white or yellowish-white powder. Very slightly soluble in water; soluble in acetone and in methyl alcohol; practically insoluble in dichloromethane. It dissolves in dilute solutions of alkali hydroxides. It exhibits polymorphism.

USP 31 (Chlorthalidone). A white or yellowish-white crystalline powder. Practically insoluble in water, in chloroform, and in ether; slightly soluble in alcohol; soluble in methyl alcohol.

Adverse Effects, Treatment, and Precautions

As for Hydrochlorothiazide, p.1307.

Breast feeding. Chlortalidone is distributed into breast milk, but a study[1] in 9 women given a dose of 50 mg daily found that the concentration in milk was only about 5% of that in the blood. However, caution was advised since chlortalidone elimination may be slower in neonates. The American Academy of Pediatrics considers[2] that chlortalidone is usually compatible with breast feeding.

1. Mulley BA, *et al.* Placental transfer of chlorthalidone and its elimination in maternal milk. *Eur J Clin Pharmacol* 1978; **13:** 129–31.
2. American Academy of Pediatrics. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001; **108:** 776–89. Correction. *ibid*; 1029. Also available at: http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776 (accessed 06/07/04)

Interactions

As for Hydrochlorothiazide, p.1309.

Anticoagulants. For references to the interaction between *warfarin* and chlortalidone, see p.1430.

Pharmacokinetics

Chlortalidone is erratically absorbed from the gastrointestinal tract and bioavailability varies according to the preparation used. It has a prolonged elimination half-life from plasma and blood of 40 to 60 hours and is highly bound to red blood cells; the receptor to which it is bound has been identified as carbonic anhydrase. Chlortalidone is much less strongly bound to plasma proteins. Chlortalidone is mainly excreted unchanged in the urine. It crosses the placental barrier and is distributed into breast milk.

◊ References.

1. Riess W, *et al.* Pharmacokinetic studies with chlorthalidone (Hygroton) in man. *Eur J Clin Pharmacol* 1977; **12:** 375–82.
2. Fleuren HLJ, *et al.* Absolute bioavailability of chlorthalidone in man: a cross-over study after intravenous and oral administration. *Eur J Clin Pharmacol* 1979; **15:** 35–50.
3. Fleuren HLJ, *et al.* Dose-dependent urinary excretion of chlorthalidone. *Clin Pharmacol Ther* 1979; **25:** 806–12.
4. Mulley BA, *et al.* Pharmacokinetics of chlorthalidone: dependence of biological half life on blood carbonic anhydrase levels. *Eur J Clin Pharmacol* 1980; **17:** 203–7.

Uses and Administration

Chlortalidone is a diuretic with actions and uses similar to those of the thiazide diuretics (see Hydrochlorothiazide, p.1310) even though it does not contain a thiazide ring system. It is given orally for hypertension

(p.1171), and for oedema, including that associated with heart failure (p.1165). Other indications include diabetes insipidus (p.2179).

Diuresis begins about 2 hours after an oral dose and lasts for 48 to 72 hours.

The usual dose in the treatment of **hypertension** is 25 mg daily, given either alone or with other antihypertensives, increasing to 50 mg daily if necessary.

In the treatment of **oedema** the usual initial dose is 25 to 50 mg daily. In severe cases a daily dose of 100 to 200 mg may be given. If possible lower doses should be used for maintenance; 25 to 50 mg daily or on alternate days may be adequate.

A dose for children is up to 2 mg/kg on alternate days.

In **diabetes insipidus** an initial dose of 100 mg twice daily has been used, reduced to a maintenance dose of 50 mg daily.

In the US, a preparation is available with improved bioavailability; suggested doses range from 15 to 50 mg daily for hypertension and 30 to 120 mg daily for oedema.

Preparations

BP 2008: Chlortalidone Tablets; Co-tenidone Tablets;
USP 31: Atenolol and Chlorthalidone Tablets; Chlorthalidone Tablets; Clonidine Hydrochloride and Chlorthalidone Tablets.

Proprietary Preparations (details are given in Part 3)
Arg.: Euretico; Hygroton; ***Austral.:*** Hygroton; ***Austria:*** Hydrosan; Hygroton; ***Belg.:*** Hygroton; ***Braz.:*** Clordilon†; Clortalil; Clortil; Clorton†; Drenidra; Higroton; Neolidona; Taluron†; ***Cz.:*** Urandil†; ***Ger.:*** Hydrolong†; Hygroton; ***Gr.:*** Hygroton; ***Hong Kong:*** Hygroton†; ***Hung.:*** Hygroton; ***India:*** Hythalton†; Thalizide; ***Indon.:*** Hygroton; ***Israel:*** Aquadon; ***Ital.:*** Igroton; ***Malaysia:*** Hygroton†; ***Mex.:*** Anilid; Bioralin; Diuprol†; Hidrona; Hidropharm; Higroton; Sinhidron; ***Neth.:*** Hygroton; ***NZ:*** Hygroton; ***Pol.:*** Hygroton; Urandil; ***Port.:*** Hygroton; ***S.Afr.:*** Hygroton; ***Spain:*** Higrotona; ***Switz.:*** Hygroton; ***Turk.:*** Hygroton; ***UK:*** Hygroton; ***USA:*** Hygroton; Thalitone; ***Venez.:*** Higroton†.

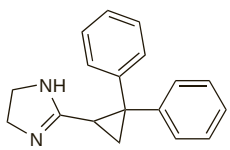
Multi-ingredient: ***Arg.:*** Atel C†; Bemplas; Hygroton-Reserpina†; Prenoretic; ***Austria:*** Arcablock comp; Atenolan comp; Atenolol comp; Atenotyrol comp†; Darebon; Polinorm; Selecturon; Tenoretic; Trasitensin; Trepress; ***Belg.:*** Logroton; Tenoretic; ***Braz.:*** Ablok Plus; Angipress CD; Atenoclor†; Atenoric; Atenuol CRT; Diupress; Higroton Reserpina; Tenoretic; ***Canad.:*** Apo-Atenidone; Tenoretic; ***Chile:*** Tenoretic†; ***Cz.:*** Amicloton; Atedon†; Atenolol Compositum†; Neocrystepin; Tenoretic; Trimecryton†; ***Denm.:*** Tenidon; Tenoretic; ***Fr.:*** Logroton; Tenoretic; Trasitensine; ***Ger.:*** Ate Lich comp; Atehexal comp; Atel; Ateno comp; Atenogamma comp; Atenolol AL comp; Atenolol comp; Blocotenol comp†; Combipresan†; Darebon†; Diu-Atenolol; duratenol comp†; Impresso†; Prelis comp; Sigabloc†; Tenoretic; Trasitensin†; Trepress; TRI-Normin; ***Gr.:*** Apress†; Chlotenor; Hygroton-Reserpine; Obosan; Tenoretic; Trasitensin; Typofen; ***Hong Kong:*** Target; Tenoret; Tenoretic; ***Hung.:*** Atenolol Comp†; Blokium Diu; ***India:*** Atecard-D†; Catapres Diu; Tenoclor; Tenoric; ***Indon.:*** Tenoret; Tenoretic; ***Irl.:*** Atecor CT; Atenetic; Tenoret; Tenoretic; ***Ital.:*** Atenigron; Carmian; Clortanol; Diube; Eupres; Igroseles; Igroton-Lopresor; Igroton-Reserpina; Target; Tenolone†; Tenoretic; Tranduir; Trasitensin; ***Malaysia:*** Apo-Atenidone; Logroton; Pretenol C; Target; Tenoret; Tenoretic; ***Mex.:*** Higroton-Res; Tenoretic; ***Neth.:*** Tenoretic; ***Philipp.:*** Tenoretic; ***Port.:*** Blokium Diu†; Tenoretic; ***Rus.:*** Atehexal Compositum (Атегексал Композитум); Tenoric (Тенорик); Tenorox (Тенороке); ***S.Afr.:*** Adco-Loten; Atenoblok Co†; Hygroton-Reserpine†; Tenchlor; Tenoretic; ***Singapore:*** Tenoret; Tenoretic; ***Spain:*** Aldoleo; Blokium Diu; Higrotensin; Higrotona Reserpina†; Normopresil; Tenoretic; Trasitensin; ***Switz.:*** Atedurex; ateno-basan comp†; Cardaxen plus; Co-Atenolol†; Cotenolol-Neo; Cotesifar†; Hygroton-Reserpine; Logroton; Primatenol Plus†; Sandoretic; Slow-Trasitensine; Tenoretic; ***Thai.:*** Tenoret†; Tenoretic†; ***Turk.:*** Regroton; Tenoretic; ***UK:*** Atenix-Co; Kalspare; Tenchlor; Tenoret; Tenoretic; Totaretic; ***USA:*** Clorpres; Combipres†; Demi-Regroton; Regroton; Tenoretic; ***Venez.:*** Blokiuret; Tenoretic.

Cibenzoline *(BAN, rINN)*

Cibenzolina; Cibenzolinum; Cifenline *(USAN)*; Ro-22-7796; Ro-22-7796/001 (cibenzoline succinate); UP-339-01. (±)-2-(2,2-Diphenylcyclopropyl)-2-imidazoline.

Цибензолин

$C_{18}H_{18}N_2$ = 262.3.
CAS — 53267-01-9 (cibenzoline); 100678-32-8 (cibenzoline succinate).
ATC — C01BG07.
ATC Vet — QC01BG07.



Adverse Effects and Precautions

Cibenzoline may cause neurological and gastrointestinal adverse effects including vertigo, tremor, nausea, vomiting, and diarrhoea. Other adverse effects include fatigue, visual disturbances, and hypoglycaemia. It prolongs the QT interval and, like other antiarrhythmics, can cause arrhythmias. It also has a negative inotropic effect and may reduce blood pressure.

Cibenzoline is contra-indicated in patients with heart block and severe heart failure. It should be used with caution in the elderly and in renal impairment, and doses should be reduced.

Effects on the neuromuscular system. Myasthenia-like symptoms have been reported[1-3] in patients with renal impairment taking cibenzoline, including severe respiratory depression in some cases.[2,3]

1. Kasuga A, *et al.* Myasthenia-like syndrome induced by overdosage of cibenzoline. *Intern Med* 1996; **35:** 512–14.
2. Similowski T, *et al.* Neuromuscular blockade with acute respiratory failure in a patient receiving cibenzoline. *Thorax* 1997; **52:** 582–4.
3. Inada K, *et al.* A case of severe respiratory depression due to cibenzoline overdosage induced by a transient renal dysfunction. *Int J Cardiol* 2002; **82:** 177–8.

Hypoglycaemia. Cibenzoline therapy was associated with severe hypoglycaemia in a 67-year-old patient.[1] The plasma-cibenzoline concentration was 1800 nanograms/mL which would probably be considered toxic since the accepted therapeutic trough range is 200 to 600 nanograms/mL. A case-control study[2] also suggested that the risk of hypoglycaemia is increased by cibenzoline.

1. Hilleman DE, *et al.* Cibenzoline-induced hypoglycemia. *Drug Intell Clin Pharm* 1987; **21:** 38–40.
2. Takada M, *et al.* The relationship between risk of hypoglycemia and use of cibenzoline and disopyramide. *Eur J Clin Pharmacol* 2000; **56:** 335–42.

Interactions

Cibenzoline should not be used with other drugs that prolong the QT interval since the risk of arrhythmias may be increased.

Histamine H_2-antagonists. Increased blood concentrations and prolonged half-lives of cibenzoline occurred in healthy subjects given *cimetidine* but the clinical importance of this was unknown.[1] The interaction did not occur with *ranitidine*.

1. Massarella JW. The effects of cimetidine and ranitidine on the pharmacokinetics of cifenline. *Br J Clin Pharmacol* 1991; **31:** 481–3.

Pharmacokinetics

Cibenzoline is well absorbed from the gastrointestinal tract after oral use, with a bioavailability of about 90%. It is about 50 to 60% bound to plasma proteins. About 60% of a dose is excreted unchanged in the urine and the elimination half-life is reported to be about 7 hours.

Uses and Administration

Cibenzoline is a class I antiarrhythmic (p.1153) that has been classified as either Ia or Ic; it also has some class III and class IV properties. It is used in the management of ventricular and supraventricular arrhythmias (p.1160). Cibenzoline is given by mouth as the succinate or intravenously as a mixture of the base and succinate, but doses for both routes are expressed in terms of the base; 145 mg of cibenzoline succinate is equivalent to about 100 mg of base. The usual oral dose of cibenzoline succinate is the equivalent of 260 to 390 mg cibenzoline daily. The usual intravenous dose is the equivalent of 1 mg/kg cibenzoline base given over 2 to 5 minutes. Dosage should be reduced in the elderly (below), and in renal impairment (below).

◊ Reviews.

1. Harron DW, *et al.* Cibenzoline: a review of its pharmacological properties and therapeutic potential in arrhythmias. *Drugs* 1992; **43:** 734–59.

Administration in the elderly. The renal and non-renal clearance of cibenzoline was found to decrease with increasing age in healthy subjects.[1] The mean elimination half-life was 7 hours in the 20- to 30-year age group and 10.5 hours in the 70- to 80-year age group. The reduction in renal clearance was considered to be related to the decrease in creatinine clearance with increasing age. The results suggested that older patients may need lower doses than younger patients to maintain therapeutic plasma-cibenzoline concentrations. Licensed product information recommends a dosage of 130 mg daily in two divided doses in elderly patients.

1. Brazzell RK, *et al.* Age and cibenzoline disposition. *Clin Pharmacol Ther* 1984; **36:** 613–19.

Administration in renal impairment. A study[1] in patients with normal or impaired renal function has suggested that in renal impairment initial loading doses of cibenzoline may be equivalent to those used in normal renal function although maintenance doses should be reduced to about two-thirds of normal. Oral doses recommended in licensed product information, based on creatinine clearance (CC), are as follows:

- CC 20 to 40 mL/min: the equivalent of 3 mg/kg daily
- CC 10 to 20 mL/min: the equivalent of 2.5 mg/kg daily

1. Aronoff G, *et al.* Bioavailability and kinetics of cibenzoline in patients with normal and impaired renal function. *J Clin Pharmacol* 1991; **31:** 38–44.

Preparations

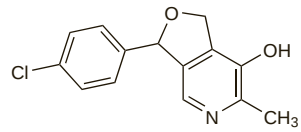
Proprietary Preparations (details are given in Part 3)
Belg.: Cipralan; ***Fr.:*** Cipralan; Exacor; ***Jpn:*** Cibenol.

Cicletanine *(BAN, USAN, rINN)* ⊗

(±)-BN-1270; Cicletanina; Ciclétanine; Cicletaninum; (±)-Cycletanide; Win-90000. (±)-3-(*p*-Chlorophenyl)-1,3-dihydro-6-methylfuro[3,4-*c*]pyridin-7-ol.

Циклетанин

$C_{14}H_{12}ClNO_2$ = 261.7.
CAS — 89943-82-8;.
ATC — C03BX03.
ATC Vet — QC03BX03.



Cicletanine Hydrochloride *(BANM, rINNM)* ⊗

Ciclétanine, Chlorhydrate de; Cicletanini Hydrochloridum; Hidrocloruro de cicletanina.

Циклетанина Гидрохлорид

$C_{14}H_{12}ClNO_2$,HCl = 298.2.
CAS — 89943-82-8;.
ATC — C03BX03.
ATC Vet — QC03BX03.

Profile

Cicletanine hydrochloride is a diuretic with properties similar to those of the thiazide diuretics (see Hydrochlorothiazide, p.1307). It is used in the treatment of hypertension (p.1171) in a usual oral dose of 50 to 100 mg daily.

Preparations

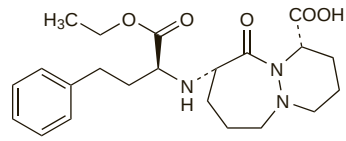
Proprietary Preparations (details are given in Part 3)
Cz.: Tenstaten†; ***Fr.:*** Tenstaten; ***Ger.:*** Justar.

Cilazapril *(BAN, USAN, rINN)*

Cilazapril monohydrát; Cilazaprilis; Cilazaprilum; Cilazaprilum Monohydricum; Ro-31-2848 (anhydrous cilazapril); Ro-31-2848/006 (cilazapril monohydrate); Silatsapriili; Silazapril. (1*S*,9*S*)-9-[(*S*)-1-Ethoxycarbonyl-3-phenylpropylamino]-10-oxoperhydropyridazino[1,2-*a*][1,2]diazepine-1-carboxylic acid monohydrate.

Цилазаприл

$C_{22}H_{31}N_3O_5$,H_2O = 435.5.
CAS — 88768-40-5 (anhydrous cilazapril); 92077-78-6 (cilazapril monohydrate).
ATC — C09AA08.
ATC Vet — QC09AA08.



Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Cilazapril). A white or almost white crystalline powder. Slightly soluble in water; freely soluble in dichloromethane and in methyl alcohol. Protect from light.

Adverse Effects, Treatment, and Precautions

As for ACE inhibitors, p.1193.

Interactions

As for ACE inhibitors, p.1196.

Pharmacokinetics

Cilazapril acts as a prodrug of the diacid cilazaprilat, its active metabolite. After oral dosage and absorption of cilazapril it is rapidly metabolised in the liver to cilazaprilat, the bioavailability of which is about 60%. Peak plasma concentrations of cilazaprilat occur within 2 hours of an oral dose of cilazapril. Cilazaprilat is elim-