

Cellulurate (*rINN*)

Cellaburát; Celaburato; Celuliozės acetatas-butiratas; Cellaburatum; Cellulosaacetatbutyrat; Cellulose Acetate Butanoate; Cellulose Acetate Butyrate; Cellulose, acétate butyrate de; Cellulose acetat butyrat; Cellulóz-acetát-butirát; Selluloosa-asettaattibutyratti.

Целлабура́т
CAS — 9004-36-8.

NOTE: Cabufocon A and Cabufocon B are both USAN for cellulose acetate butyrate.

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

Ph. Eur. 6.2 (Cellulose Acetate Butyrate). A partly or completely *O*-acetylated and *O*-butyrate cellulose containing not less than 2.0% and not more than 30.0% of acetyl groups and not less than 16.0% and not more than 53.0% of butyryl groups, calculated with reference to the dried substance. A white, yellowish-white, or greyish-white, slightly hygroscopic, powder or granules. Practically insoluble in water and in alcohol; soluble in acetone, in formic acid, and in a mixture of equal volumes of methyl alcohol and dichloromethane. Store in airtight containers.

Profile

Cellulurate is a pharmaceutical excipient used in drug delivery systems. It has also been used in hydrophobic contact lens materials.

Cellobiose

Glucobiosa. 4-*O*-β-D-Glucopyranosyl-D-glucose.

C₁₂H₂₂O₁₁ = 342.3.
CAS — 528-50-7.

Profile

Cellobiose is an indigestible disaccharide that has been used to assess intestinal permeability. It has been used as an alternative to lactulose in the differential sugar absorption test (p.1739).

Cellulase (*USAN*)

Celulasa.
CAS — 9012-54-8.

Profile

Cellulase is a concentrate of cellulose-splitting (cellulolytic) enzymes derived from *Aspergillus niger* or other sources. It is used in food processing and has been given orally with other digestive enzymes for its supposed benefit in minor digestive disorders such as dyspepsia and flatulence. Hemicellulase has been given for similar purposes.

Preparations

Proprietary Preparations (details are given in Part 3)

Fr.: Pancrelase; **Rus.:** Festal (Дефтал).

Multi-ingredient: **Arg.:** Arnol; Biletan Enzimatico; Biluen Enzimatico; Dom-Polenzim; Gastridin-E; Gastron Fuerte†; Pakinase; Pankreon Total; Polenzim; **Austria:** Arca-Enzym; Ora-Gallin; **Belg.:** Digestomen; **Braz.:** Dasc; Digeapac-Zimatico; Digeplus; Essen; Sintozima; **Canada:** Digesta; **Chile:** Onotinj†; **Hong Kong:** Topase†; **India:** Dipex; Farizym; Ipen††; Panolase†; **Indon.:** Cotazym Forte; **Ital.:** Digestopan†; Essen Enzimatico†; **Mex.:** Dixifer; Colaven Enzimatico; Ochozim; Onotinj; **Philipp.:** Spasmo-Canulase; **Port.:** Ecalerin-F; Espasmo Canulase; Fermetone Composto; **Rus.:** Ipen†al (Ипен†рал); **S.Afr.:** Spasmo-Canulase; **Spain:** Paldozim; **Switz.:** Spasmo-Canulase; Zymoplex†; **Thai.:** Sanzyme-5†; **Turk.:** Flaton; **USA:** Enzyme; **Venez.:** Stamylo.

Centaury

Centáurea menor; Centaurée, petite; Centaurii herba; Centaurii Minoris Herba; Ezerjófű; Petite Centaurée; Rohtorantasappi; Šir-džoljū žolė; Tausendgüldenkraut; Tusengyllenört; Zeměžlučová nat'; Ziele centurii.

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

Ph. Eur. 6.2 (Centaury). The whole or fragmented dried flowering aerial parts of *Centaureum erythraea*. It has a bitter taste. Protect from light.

Profile

Centaury is used as a bitter, including for appetite loss and dyspepsia.

Hepatotoxicity. A report¹ of hepatotoxicity possibly associated with the use of *Copaltra*, a herbal preparation marketed as an adjunct in the treatment of diabetes mellitus and containing centaury and *Coutarea latiflora* (copalchi) (Rubiaceae). A further 5 cases had been reported to the French pharmacovigilance network.

1. Wurtz A-S, et al. Possible hepatotoxicity from Copaltra, an herbal medicine. *Ann Pharmacother* 2002; **36**: 941–2.

Preparations

Proprietary Preparations (details are given in Part 3)

Cz.: Nat Zemezluc†.

Multi-ingredient: **Austria:** China-Eisenwein; Eryval; Magentee St Severin; Mariazeller; **Braz.:** Camomila; **Cz.:** Naturland Grosser Swedenbitter†; Stomaran; **Fr.:** Diacure; Tisane Hepatique de Hoerd†; **Ger.:** Amara-Tropfen; Canephron; Leber-Galle-Tropfen 83†; Montana N; Stullmaton†; **Ital.:** Assenzio (Specie Composta)†; Centaurea (Specie Composta)†; Genziana (Specie Composta)†; **Rus.:** Canephron N (Канефрон Н); Herbion Drops

The symbol † denotes a preparation no longer actively marketed

for the Stomach (Гербион Желудочные Капли); Original Grosser Bitter Balsam (Оригинальный Большой Бальзам Биттера); **S.Afr.:** Amara; Clair-ro; **Spain:** Natusor; Hepavesical†; Odisor†; **Switz.:** Gastrosan; Phytomed Gastro†; Tisane pour l'estomac.

Cereus

Cactus; Night-blooming Cereus.

Profile

Cereus, the flowers and stems of night-blooming cereus (*Selenicereus grandiflorus*; *Cactus grandiflorus*) (Cactaceae), is thought to have cardiac stimulant actions and has been used in various cardiovascular disorders. It has also been used as an antihelmintic and in the treatment of rheumatism.

Homoeopathy. Cereus has been used in homoeopathic medicines under the following names: Cactus; Selenicereus grandiflorus; Cactus grandiflorus.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Ger.:** Cardibisan†; Oxacant N†; Oxacant-forte N†; Oxacant-Khella N†.

Ceruletide (*BAN, USAN, rINN*)

Caerulein; Cerulein; Ceruletide; Ceruletida; Cérulétide; Ceruletidium; Fl-6934; 883-S; Seruletidi.

Церулетид

C₅₈H₇₃N₁₃O₂₁S₂ = 1352.4.

CAS — 17650-98-5 (ceruletide); 71247-25-1 (ceruletide diethylamine).

ATC — V04CC04.

ATC Vet — QV04CC04.

NOTE: The name Ceruleinum has been applied to Indigo Carmine (p.2324).

Description. Ceruletide is a decapeptide amide originally isolated from the skin of the Australian frog, *Hyla caerulea*, and other amphibians. Ceruletide may exist as a salt with 1 to 3 moles of diethylamine (ceruletide diethylamine).

Adverse Effects

Ceruletide stimulates gallbladder contraction and gastrointestinal muscle and may give rise to abdominal discomfort. Hypotensive reactions may also occur.

Uses and Administration

Ceruletide is structurally related to pancreozymin (p.2361) and has similar actions. When given parenterally it stimulates gallbladder contraction and relaxes the sphincter of Oddi; it also causes an increase in the secretion of pancreatic enzymes and stimulates intestinal muscle.

As ceruletide diethylamine it is used as an aid to diagnostic radiology and in the management of paralytic ileus. It is also used in tests of pancreatic exocrine function, sometimes with secretin (p.2384); these studies generally require duodenal intubation of the patient and examination of duodenal aspirate and are rarely performed.

For most radiographic procedures of the biliary and digestive tracts ceruletide diethylamine is given by intramuscular injection in a dose equivalent to 300 nanograms/kg of ceruletide. Doses equivalent to 1 to 2 nanograms/kg per minute are given by intravenous infusion in pancreatic function tests and in the treatment of paralytic ileus.

Preparations

Proprietary Preparations (details are given in Part 3)

Ger.: Takus.

Cevimeline Hydrochloride (*USAN, rINN*)

AF-102; AF-102B; Céviméline, Chlorhydrate de; Cevimelini Hydrochloridum; FKS-508; Hydrocloruro de cevimelinea; SND-5008; SNI-2011; SNK-508. (±)-*cis*-2-Methylspiro[1,3-oxathiolane-5,3'-quinuclidine] hydrochloride hemihydrate.

Цевимелина Гидрохлорид

C₁₀H₁₇NOS.HCl / H₂O = 244.8.

CAS — 107233-08-9 (cevimeline); 153504-70-2 (cevimeline hydrochloride).

Adverse Effects, Treatment, and Precautions

As for Neostigmine, p.631.

Sweating is a common problem with cevimeline; patients who sweat excessively should be advised to drink extra fluids to avoid dehydration. The manufacturer recommends that cevimeline should not be given when miosis is undesirable such as in patients with acute iritis or angle-closure glaucoma. Blurred vision may affect the performance of skilled tasks. In addition cevimeline should be given with care to those with renal calculi or with biliary-tract disorders. It should also be used with caution in patients deficient in the cytochrome P450 isoenzyme CYP2D6 who may be at a higher risk of adverse effects.

Interactions

As for Neostigmine, p.632.

Drugs which inhibit cytochrome P450 isoenzymes CYP2D6, CYP3A3, or CYP3A4 inhibit the metabolism of cevimeline.

Pharmacokinetics

After oral doses cevimeline is absorbed from the gastrointestinal tract; peak concentrations are reached in 1.5 to 2 hours. The rate and extent of absorption are decreased when given with food. Cevimeline is less than 20% bound to plasma proteins. It is metabolised in the liver by cytochrome P450 isoenzymes CYP2D6, CYP3A3, and CYP3A4. Cevimeline is primarily excreted in the urine, mainly as metabolites; about 0.5% of a dose is excreted in the faeces.

Uses and Administration

Cevimeline is a selective muscarinic M₁ agonist used to improve the symptoms of dry mouth (see p.2140) in patients with Sjögren's syndrome. It is given as the hydrochloride by mouth in doses of 30 mg 3 times daily.

Dementia. Muscarinic M₁ agonists such as cevimeline have proved unsuccessful in relieving the symptoms of Alzheimer's disease (see p.362).

Preparations

Proprietary Preparations (details are given in Part 3)

USA: Evovac.

Chamomile

Camomille romaine, fleur de (chamomile flower; Roman); Chamomilla romanae flos (chamomile flower; Roman); Heřmánkový květ (matricaria flower); Kamillavirágzat (matricaria flower); Kamomillankukka (matricaria flower); Kamomillankukka, roomalainen (chamomile flower; Roman); Kamomillblomma (matricaria flower); Kamomillblomma, romersk (chamomile flower; Roman); Koszyczek rumianku (matricaria flower); Květ heřmánku římského (chamomile flower; Roman); Manzanilla; Matricaire, fleur de (matricaria flower); Matricariae flos (matricaria flower); Ramunélių žiedai (matricaria flower); Rómaikamillavirág (chamomile flower; Roman); Tauriųjų didramunių žiedai (chamomile flower; Roman).

Description. The name Chamomile is used for the dried flowerheads from 2 species of *Compositae* having similar medicinal properties:

- Chamomile from *Anthemis nobilis* (*Chamaemelum nobile*) is known as Chamomile Flowers, Chamomillae Romanae Flos, Manzanilla Romana, or Roman Chamomile Flower.

- Chamomile from *Matricaria recutita* (*Chamomilla recutita*) is known as Camomile Allemande, Camomilla, Chamomilla, Chamomillae Anthodium, Flos Chamomillae, Flos Chamomillae Vulgaris, German Chamomile, Hungarian Chamomile, Kamillenblüten, Manzanilla Ordinaria, Matricaria Flower, or Matricariae Flos

Pharmacopoeias. *Eur.* (see p.vii) includes chamomile from *Anthemis nobilis* and *Matricaria recutita*. *US* includes chamomile from *Matricaria recutita*.

Eur. also includes Matricaria Oil.

Ph. Eur. 6.2 (Chamomile Flower; Roman; Chamomile Flowers BP 2008). The dried flowerheads obtained from the cultivated double variety of *Anthemis nobilis* (*Chamaemelum nobile*), containing not less than 0.7% w/w of essential oil, calculated with reference to the dried drug. It has a strong characteristic odour. Protect from light.

Ph. Eur. 6.2 (Matricaria Flower; Matricariae Flos; Matricaria Flowers BP 2008). The dried flowerheads obtained from *Matricaria recutita* (*Chamomilla recutita*), containing not less than 0.4% w/w of blue essential oil and 0.25% of apigenin-7-glucoside, calculated with reference to the dried drug. Protect from light.

Ph. Eur. 6.2 (Matricaria Oil; Matricariae Aetheroleum). The blue essential oil obtained by steam distillation from the fresh or dried flower-heads or flowering tops of *Matricaria recutita* (*Chamomilla recutita*). There are 2 types of matricaria oil which are characterised as rich in bisabolol oxides, or rich in levomenol. Store in a well-filled, airtight container at a temperature not exceeding 25°. Protect from light.

USP 31 (Chamomile). The dried flowerheads of *Matricaria recutita* (*Matricaria chamomilla*, *Matricaria chamomilla* var. *courrantiana*, *Chamomilla recutita*) (Asteraceae alt. Compositae). It contains not less than 0.4% of blue volatile oil, not less than 0.3% of apigenin-7-glucoside, and not less than 0.15% of bisabolane derivatives, calculated as levomenol. Protect from light.

Profile

Chamomile has been applied externally as a poultice in the early stages of inflammation, and preparations containing chamomile or extracts of chamomile (including the oil or a constituent, chamazulene), have been used for skin disorders, including the prevention and treatment of cracked nipples and nappy rash. Chamomile German oil and Chamomile Roman oil are used in aromatherapy. 'Chamomile tea' is a domestic remedy for indigestion and has also been reported to have hypnotic properties.

There have been reports of contact sensitivity and anaphylaxis.