

**Uses and Administration**

Belladonna has the actions of atropine (p.1219). Belladonna herb and its preparations have been used for their antimuscarinic actions in a wide range of conditions, including the relief of gastrointestinal and urinary-tract disorders associated with smooth muscle spasm, but they are generally regarded as an outmoded form of treatment.

Belladonna liniments and plasters have been used as counter-irritants for the relief of pain but there is little evidence that they have a beneficial effect and adverse effects have occurred.

**Homoeopathy.** Belladonna has been used in homoeopathic medicines under the following names: *Atropa bella-donna*; *Bell.*

**Preparations**

**Ph. Eur.:** Belladonna Leaf Dry Extract, Standardised; Belladonna Leaf Tincture, Standardised;

**USP 31:** Belladonna Extract; Belladonna Extract Tablets; Belladonna Tincture.

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

**Austral.:** Atrobel†; **Austria:** Bellanorm; **Chile:** Felaxen†; **Ger.:** Belladonnysat Burger; Tremoforat†; **Pol.:** Bellapan; **Venez.:** Atroveran.

**Multi-ingredient: Arg.:** Antipasmo†; Benitol; Cascara Sagrada Bouzen†; Cascara Sagrada Oligoplex; Dioxicolagol; Hepacur; Hepatodirectol; Opobyl; Passacanthine†; Tmxol†; **Austria:** Asthma 23 D; Tampositonen mit Belladonna; **Belg.:** Colimax†; Eucalyptine Pholcodine Le Brun†; Gastrofilm†; Grains de Vals; Saintbois; **Braz.:** Acridin; Benzomel†; Bisuisan†; Broncol; Bronquidex; Bronitoss; Calminex Atleta; Calminex H; Cessatosse†; Cystex; Donveran†; Ductoveran; Etaverol†; Gastrobene; Gotas Nican†; Iodeto de Potassio†; Pilulas Ross; Regulador Xavier N-1†; Regulador Xavier N-2†; Revulsan†; Salicilato de Bismuto Composto†; Solvobil; Teutos†; Tussifen†; Tussucalmant†; Xarope de Caraguata†; Xarope Sao Joao†; **Canad.:** Beller-gal; Cafergot-PB†; Rheumalan†; **Chile:** Beller-gal Retardado†; Belupan†; Broncodeina; Cafergot-PB†; Ergobelan; Fenokomp 39; Fenoltaleina Com-puesta†; Gotas Nican†; Gruben; Ramistos; **Cz.:** Bellaspon†; Capsicolle; Contraspant†; Homeovox; **Denm.:** Gynergen Comp; **Fin.:** Tannopon; **Fr.:** Gelumaline†; Humex†; Suppomaline; **Ger.:** Dalet Med Balsam†; **Hung.:** Artint†; Kefalgin; **India:** Emantid†; Migranil; Molzym†; **Indon.:** Bellapheen; Spasmi; Spasmi-al; Stomadon; **Israel:** Laxative; Laxative Comp; **Ital.:** Antiemorridali; Antispasmina Colica; Lassatina†; **Jpn.:** Colgen Kowa Bien Soft Mini; **Mex.:** Chofabot; Parche Negro Belladonna; Reudol; **Pol.:** Alax; Beller-got; Biospasmi†; Cholitol; Hemorol; Kapsiplast; Spasticol; **Port.:** Anti-Gripe†; Antispasmina Colica; Anucet†; Balsamo Analgesico Sanitas; Migretil; Servet-inal†; Vaponi; **Rus.:** Anusol (Анузол); Bethiol (Бетиол); Solutan (Солутан); **S.Afr.:** Bennetts Colic Mixture; Bolus Eucalypti Comp; Cafergot-PB†; **Spain:** Alofedina; Boldolaxin†; Broncovital†; Cafergot-PB†; Carminativo Ju-ventus; Crislaxo; Digestovital†; Dolokey; Equidant†; Laxante Bescansa Aloico; Menabil Complex†; Sin Mareo x 4; Tanage†; **Switz.:** Bellagotin†; Bro-mocod N; Cafergot-PB; Demo Elixir pectoral N; Dragees S contre la toux†; Escotussin; Lysedil; Nican; Phol-Tux; Saintbois; **Thai.:** Belacid; Beller-gal†; Benera; Delta Charcoal; Neuramizone; **Turk.:** Beller-gal; **UK:** Opazimes; **USA:** B & O Supporettes No. 15A; B & O Supporettes No. 16A; Bel-Phen-Ergot S; Bellamine; Beller-gal-S; Butibel; Cafatine-PB; Folergot-DF; Phener-bel-S; **Venez.:** Atrobel; Cloverin†; Codoformo†; Ervostal; Neo-Atropan†; Traveget.

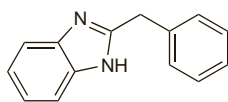
**Bendazol Hydrochloride** (rINN)

Bendazol, Chlorhydrate de; Bendazoli Hydrochloridum; Dibazol; Hidrocloruro de bendazol. 2-Benzylbenzimidazole hydrochloride.

Бендазола Гидрохлорид

$C_{14}H_{12}N_2 \cdot HCl = 244.7$ .

CAS — 621-72-7 (bendazol); 1212-48-2 (bendazol hydrochloride).



(bendazol)

**Profile**

Bendazol hydrochloride is used as an antispasmodic.

**Bentriomide** (BAN, USAN, rINN)

Bentriomid; Bentriomida; Bentriomidi; Bentriomidum; BTPABA; BT-PABA; E-2663; PFT; Ro-11-7891. 4-(N-Benzoyl-L-tyrosylamino)benzoic acid.

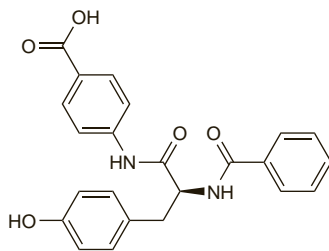
Бентриомид

$C_{23}H_{20}N_2O_5 = 404.4$ .

CAS — 37106-97-1.

ATC — V04CK03.

ATC Vet — QV04CK03.

**Profile**

Bentriomide has been given orally as a noninvasive test of exocrine pancreatic function, the amount of *p*-aminobenzoic acid and its metabolites excreted in the urine being taken as a measure of the chymotrypsin-secreting activity of the pancreas. Headache and gastrointestinal disturbances have been reported in patients receiving bentriomide. The bentriomide test has given misleading results in patients with gastrointestinal, liver, or kidney disorders, or in patients receiving certain foods or drugs that are excreted as arylamines. Some of these drugs included benzocaine, chloramphenicol, lidocaine, paracetamol, procaine, procainamide, sulfonamides, and some diuretics.

## ◇ References.

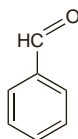
- Hoek FJ, *et al.* Improved specificity of the PABA test with *p*-aminosalicylic acid (PAS). *Gut* 1987; **28**: 468-73.
- Puntis JWL, *et al.* Simplified oral pancreatic function test. *Arch Dis Child* 1988; **63**: 780-4.

**Benzaldehyde**

Benzaldehyd; Benzaldehyd.

$C_7H_6O = 106.1$ .

CAS — 100-52-7.



**Pharmacopoeias.** In Br. Also in *USNF*.

**BP 2008** (Benzaldehyde). A clear colourless liquid with a characteristic odour of bitter almonds. Slightly soluble in water; miscible with alcohol and with ether. Store at a temperature not exceeding 15° in well-filled containers. Protect from light.

**USNF 26** (Benzaldehyde). A colourless strongly refractive liquid with an odour resembling that of bitter almond oil and a burning aromatic taste. Slightly soluble in water; miscible with alcohol, with ether, and with fixed and volatile oils. Store in well-filled, airtight containers. Protect from light.

**Profile**

Benzaldehyde is used as a flavour as an alternative to volatile bitter almond oil. It may cause contact dermatitis.

**Preparations**

**USNF 26:** Compound Benzaldehyde Elixir

**Benzyl Cinnamate**

Benzylu cynamonian; Cinnamein. Phenylmethyl 3-phenyl-2-propenoate.

$C_{16}H_{14}O_2 = 238.3$ .

CAS — 103-41-3.

**Profile**

Benzyl cinnamate is a constituent of various balsams and resins, including Peru balsam (p.2365), to which it has been used similarly. It is also used as a flavour and in perfumery.

**Preparations**

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

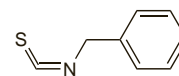
**Multi-ingredient: Belg.:** Pulmex; Pulmex Baby; **Braz.:** Ozonyl; **UK:** Sudocrem.

**Benzyl Isothiocyanate**

Bencilo, isotiocinato de; Benzyl Mustard Oil; Benzylsenfö; Oleum Tropaeoli.

$C_8H_7NS = 149.2$ .

CAS — 622-78-6.



**Pharmacopoeias.** *Fr.* includes Capucine (*Tropaeolum majus*).

**Profile**

Benzyl isothiocyanate is an oil obtained from *Tropaeolum majus* (Capuchin cress; common nasturtium) (*Tropaeolaceae*) that has been given as an antibacterial.

*Tropaeolum majus* has been used in herbal medicine.

**Homoeopathy.** *Tropaeolum majus* has been used in homoeopathic medicines.

**Preparations**

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

**Multi-ingredient: Ger.:** Angocin Anti-Infekt N; Nephroselect M.

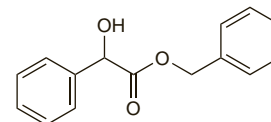
**Benzyl Mandelate**

Benzyl Phenylglycolate; Benzylin; Benzylis Mandelas; Benzylum Amygdalicum; Benzyl-DL-mandelate; Mandelsäurebenzylester.

БЕНЗИЛ МАНДЕЛАТ

$C_{15}H_{14}O_3 = 242.3$ .

CAS — 890-98-2.

**Profile**

Benzyl mandelate has been used for its antispasmodic actions. It has also been included in preparations with analgesics in an attempt to increase the analgesic effect.

**Preparations**

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

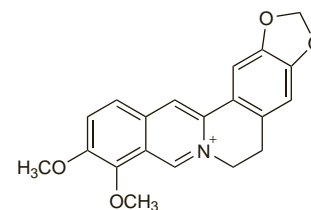
**Multi-ingredient: Austria:** Spasmo Claim; Spasmocor; **Ger.:** Fohnetten N†; **Switz.:** Seranex sans codeine†; **Turk.:** Spalt.

**Berberine**

Berberina. 5,6-Dihydro-9,10-dimethoxybenzo[g]-1,3-benzodioxolo[5,6-*a*]quinolinizinium.

$C_{20}H_{18}NO_4 = 336.4$ .

CAS — 2086-83-1 (berberine); 633-65-8 (berberine chloride); 633-66-9 (berberine sulfate).



**Pharmacopoeias.** *Chin.* includes berberine chloride. *Jpn* includes berberine chloride hydrate and berberine tannate. *Viet.* includes berberine chloride dihydrate.

**Profile**

Berberine is a quaternary alkaloid present in hydrastis, in various species of *Berberis*, and in many other plants. It has been used as a bitter and as a flavour in food and alcoholic drinks. It possesses antimicrobial activity and has also been tried as various salts in a number of infections.

## ◇ References.

- Khin-Maung-U, *et al.* Clinical trial of berberine in acute watery diarrhoea. *BMJ* 1985; **291**: 1601-5.
- Rabbani GH, *et al.* Randomized controlled trial of berberine sulfate therapy for diarrhea due to enterotoxigenic *Escherichia coli* and *Vibrio cholerae*. *J Infect Dis* 1987; **155**: 979-84.
- Vennerstrom JL, *et al.* Berberine derivatives as antileishmanial drugs. *Antimicrob Agents Chemother* 1990; **34**: 918-21.
- Phillipson JD, Wright CW. Medicinal plants in tropical medicine: 1 Medicinal plants against protozoal diseases. *Trans R Soc Trop Med Hyg* 1991; **85**: 18-21.

**Preparations**

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

**Austral.:** Murine; **Venez.:** Insof†.

**Multi-ingredient: Braz.:** Neo Quimica Colirio; Visazul; Visolon; **Fr.:** Dacollyre; **India:** Emantid†.