

Sodium Dibunate (BAN, rINN)

Dibunate de Sodium; Dibunato de sodio; L-1633; Natrii Dibunas. Sodium 2,6-di-tert-butyl-naphthalene-1-sulphonate.

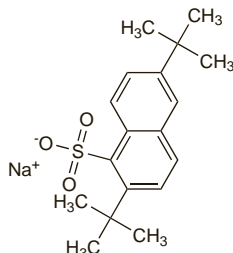
Натрий Дибунат

$C_{18}H_{23}NaO_3S = 342.4$.

CAS — 14992-59-7 (sodium dibunate).

ATC — R05DB16.

ATC Vet — QR05DB16.

**Profile**

Sodium dibunate is a cough suppressant given by mouth and rectally in non-productive cough (p.1547). It is claimed to have central and peripheral actions. Chlorcyclizine dibunate (naftoclizine) has also been given by mouth or rectally.

Preparations

Proprietary Preparations (details are given in Part 3)

Chile: Dibunafon; **Port.:** Becantex; **Thai:** Becantex†.

Multi-ingredient: **Belg.:** Nobronciti; **Braz.:** Becantosse†; Beclase; Cessatosse†; Coquevit†; Gotas Nicant†; Naquinto†; Pectal†; Pulmoverina†; Tus-sodina†; **Canad.:** Balmiril Suppositories; **Ger.:** Cito-Guakalin†; Epepect-Blocker-Pastillen N; **Hong Kong:** Epepect Blocker; **Mex.:** Broend; Neo-Bronty; Tasakal†; **Thai.:** Coughmint†.

Squill

Bulbo de Escila; Cebolla Albarrana; Cila; Escila; Meerzwiebel; Scilla; Scillae bulbus; Scille; Scille, bulbe de; White Squill.

Морской Лук

Pharmacopoeias. In *Br* and *Ger*.

BP 2008 (Squill). The dried sliced bulb of *Drimia maritima* with the membranous outer scales removed, and containing not less than 68% of alcohol (60%) -soluble extractive. Store at a temperature not exceeding 25° in a dry place.

Indian Squill

Escila india; Urginea.

Морской Лук Индийский

Pharmacopoeias. In *Br*.

BP 2008 (Indian Squill). The bulb of *Drimia indica*, with the outer membranous scales removed, usually sliced and dried. Store at a temperature not exceeding 25° in a dry place.

Adverse Effects, Treatment, and Precautions

The adverse effects of squill and Indian squill in large doses include nausea, vomiting, and diarrhoea. As squill and Indian squill contain cardiac glycosides they can cause similar adverse effects to digoxin (p.1259).

Abuse. Reports of cardiac glycoside toxicity and myopathy associated with the abuse of linctuses which have contained opiates and squill.¹⁻⁵

- Kennedy M. Cardiac glycoside toxicity: an unusual manifestation of drug addiction. *Med J Aust* 1981; **2**: 686-9.
- Kilpatrick C, et al. Myopathy with myasthenic features possibly induced by codeine linctus. *Med J Aust* 1982; **2**: 410.
- Seow SSW. Abuse of APF linctus codeine and cardiac glycoside toxicity. *Med J Aust* 1984; **140**: 54.
- Thurston D, Taylor K. Gee's Linctus. *Pharm J* 1984; **233**: 63.
- Smith W, et al. Wenckebach's phenomenon induced by cough linctus. *BMJ* 1986; **292**: 868.

Uses and Administration

Squill and Indian squill are used as expectorants in productive cough (p.1547) and have been given as the oxymel, elixir, tincture, or vinegar. Preparations containing squill are used in some countries in the treatment of cardiovascular disorders.

Red squill has been used as a rodenticide (p.2050).

◊ The historical use of squill has been reviewed.¹

- Aliotta G, et al. The diuretic use of Scilla from Dioscorides to the end of the 18th century. *J Nephrol* 2004; **17**: 342-7.

Preparations

BP 2008: Squill Liquid Extract; Squill Oxymel.

Proprietary Preparations (details are given in Part 3)

Ger.: Digitalysat Scilla-Digitaloid†; Scillase N†.

Multi-ingredient: **Canad.:** Bronco Asmol; Sirop Cocillana Codeine; Sirop Cocillana Compose; **Ger.:** Miroton; Miroton N†; Nephrisan P†; **Hong Kong:** Coci-Fedra; Coci-Fedra-C; Cocillana Christo; Cocillana Com-

ound; Dextrocilla; Eurocilana; Mefedra-N†; Mist Expect Stim; **S.Afr.:** Cocillana Co; Contra-Coff; Linctus Tussi Infans; **UK:** Allens Chesty Cough; Balm of Gilead; Buttercup Syrup; Chest Mixture; Covonia Mentholated; Galloway's Cough Syrup; Honey & Molasses; Modern Herbsal Cough Mixture; Potters Children's Cough Pastilles; Potters Gees Linctus; Sanderson's Throat Specific.

Sulfogaiacol (rINN)

Kalii Sulfogajacolas; Kalium Guajacolsulfonicum; Kaliumsulfogajakolaatti; Kaliumsulfogajakolat; Potassium Guaiacolsulfonate; Potassium Guaiacolsulphonate; Sulfogaiacol; Sulfogaiacolum; Sulfogayacol; Sulfogwajakol; Thiocol; Tiocol. Potassium hydroxymethoxybenzenesulphonate hemihydrate.

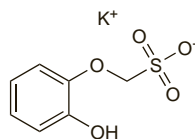
Сульфогайякол

$C_7H_7KO_5S \cdot H_2O = 251.3$.

CAS — 1321-14-8 (anhydrous sulfogaiacol); 78247-49-1 (sulfogaiacol hemihydrate).

ATC — R05CA09.

ATC Vet — QR05CA09.



Pharmacopoeias. In *Pol* and *US*. Also in *Fr* and *Jpn*, both of which do not specify the hemihydrate.

USP 31 (Potassium Guaiacolsulfonate). Protect from light.

Profile

Sulfogaiacol is used as an expectorant for productive cough (p.1547). Calcium guaiacolsulfonate has been used similarly.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Pectoral Lafedar Ninos; **Austria:** Pectosorin; **Israel:** Guaiacol; **Ital.:** Tioguaialina; **Mex.:** Broncoserum; **Pol.:** Aplitussic; Diabetussic.

Multi-ingredient: **Arg.:** Antitos†; Medex Rub; No-Tos Infantil; Pastillas De Ambay; Pectobron; Pectoral Lafedar; Polipectol†; **Austria:** Asthma-Hilfe; Pneumopan; **Belg.:** Broncho-pectoralis Pholcodine; Eucalyptine Pholcodine Le Brun†; Eucalyx†; Nobronciti; Pholco-Mereprine; Saintbois; **Braz.:** Benzomel†; Broncatar; Broncofin†; Bronkotrat†; Cessatosse†; Epepectil; Fenergan Expectoante; Frenotossil†; Iodetal; Iodeto de Potassio†; Ipecol†; Pulmonix†; Pulmoverina†; Trifedrin; Tussodina†; Tussucalman†; Xarope Sao Joao†; Xpe SPC†; **Fr.:** Camphodiony†; Ephydion; Eucalyptine Le Brun; Germose†; Neo-Codion; Passedy†; **Hong Kong:** Bendracol; Chrisracol; **Hung.:** Erigon; **India:** Neogadine SG; Pulmo-Cod (C & G); **Indon.:** Benacol DTM; Benacol Expectoant; Fludexin; Phenadex; Promex; Promethazine Ikaparmindo; Sanadry†; **Israel:** Cod-Guaiacol; Oxacatin; Pertussol; Promethazine Expectoants; Shiulon; Tussophedrine New Formula; **Ital.:** Balsamina Kroner; Balsatux†; Broncal†; Bronchenolo; Bronchiase; Donalg Guaiacalium Complex; Polised; Pulmarin; Sciroppo Berta; Stenobronchial; Tauglicolo; Tiocalmina; Tiococol; Tionamil†; Tussanyi; **Mex.:** Eucalyptine; Ex-offi; Oxin; Pulmavit†; **Pol.:** Apipulmol; Gwajatussin; Herbapect; Pastylki Wykrztusne; Thiocodin; **Port.:** Calmarum†; Codol; Lesil; Xarope Antigripal†; **Rus.:** Neo-Codion (Heo-Koдион); **Spain:** Bronco Medical; Bronco-vir; Broncovital†; Brota Rectal Balsamico; Fenergan Expectoante; Pastillas Pectoral Kely; Pazbronquial; Pulmofasa; **Switz.:** Neo-Codion N; Phol-Tux Saintbois; **Thai.:** Bisolvon EX; Bromo-Ex; Dutross-P200†; Hustazol-C†; Med-Mucolo†; **Turk.:** Antibeksin; Artu; Fenokodin; Gayabeksin; Gayaben; Latusin; Pektodin; **USA:** Cypex; De-Chlor NX; Entuss Expectoant; Humibid; Humibid DM; Hy-KXP; Hydron EX; Hydron KGS; KGS-PE; Lemotussin-DM; Marcof; Protuss-D†; Protuss†.

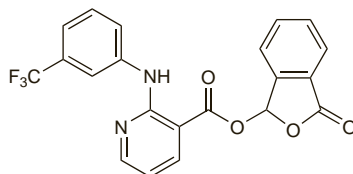
Talniflumate (USAN, rINN)

BA-7602-06; Talniflumato; Talniflumatum. Phthalidyl 2-(α,α,α -trifluoro-*m*-toluidino)nicotinate.

Тальнифлумат

$C_{21}H_{13}F_3N_2O_4 = 414.3$.

CAS — 66898-62-2.

**Profile**

Talniflumate inhibits the human calcium-activated chloride channel protein hCLCA1, which is overexpressed in the lungs of patients with certain pulmonary diseases associated with exces-

sive or abnormal mucus production. Talniflumate is under investigation for the management of cystic fibrosis, chronic obstructive pulmonary disease, and asthma. Talniflumate has also been used to treat inflammation.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Somalgen.

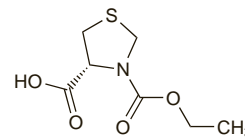
Telmesteine (rINN)

Telmesteina; Telmestéine; Telmesteinum. (-)-3-Ethyl hydrogen (R)-3,4-thiazolidinedicarboxylate.

Тельместейн

$C_7H_{11}NO_3S = 205.2$.

CAS — 122946-43-4.

**Profile**

Telmesteine has been used as a mucolytic (p.1547) in the treatment of respiratory-tract disorders in oral doses of 300 mg two or three times daily.

Preparations

Proprietary Preparations (details are given in Part 3)

Ital.: Muconorm†; Reolase.

Multi-ingredient: **UK:** Atopiclair; Xclair; **USA:** Atopiclair.

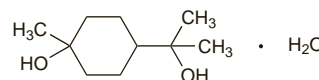
Terpin Hydrate (BANM)

Terpene Hydrate; Terpiinihydratti; Terpina, hidrató de; Terpinhydrat; Terpini Hydras; Terpinol. *p*-Menthane-1,8-diol monohydrate; 4-Hydroxy- $\alpha,\alpha,4$ -trimethylcyclohexanemethanol monohydrate.

Терпингидрат

$C_{10}H_{20}O_2 \cdot H_2O = 190.3$.

CAS — 80-53-5 (anhydrous terpin); 2451-01-6 (terpin monohydrate).



Pharmacopoeias. In *Fr*, *Swiss*, *US*, and *Viet*.

USP 31 (Terpin Hydrate). Colourless lustrous crystals or white powder with a slight odour. It effloresces in dry air. Soluble 1 in 200 of water, 1 in 35 of boiling water, 1 in 13 of alcohol, 1 in 3 of boiling alcohol, and 1 in 140 of chloroform and of ether. A hot 1% solution is neutral to litmus. Store in airtight containers.

Stability. If crystals form in terpin hydrate elixir, they may be redissolved by warming the closed container of solution in warm water and then gently shaking it.

Profile

Terpin hydrate has been stated to increase bronchial secretion directly and has been given orally as an expectorant in productive cough (p.1547).

Nausea, vomiting, or abdominal pain may follow the ingestion of terpin hydrate on an empty stomach.

Terpin hydrochloride has also been used.

Preparations

USP 31: Terpin Hydrate and Codeine Elixir; Terpin Hydrate Elixir.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Braz.:** Ozony†; Tetrapulmo; **Canad.:** Valda; **Chile:** Broncoedina; **Cz.:** Coldrex; **Fin.:** Toclase Expectoant; **Fr.:** Bronchorectine au Citral; Pates Pectorales; Pulmo fluoride Simple; Pulmolli; Terpone; **Ger.:** Ozothin†; **Hong Kong:** Bendracol; Chrisracol; Codoplex; Coldcap-A; Coldrex†; Coldtab-2; Panadol Cold & Flu Day; Panadol Cold & Flu Extra; Panadol Cold and Flu; **Hung.:** Coldrex; **Ital.:** Elisir Terpin; Neo Borocillina Balsamica; Tionamil†; **Neth.:** Balsoclase Compositum; **Pol.:** Coldrex Max-Grip C; **Rus.:** Alex Plus (Алекс Плюс); Glycodin (Гликодин); **Spain:** Pastillas Pectoral Kely; Terponil; **Switz.:** Bromocod N; Rectoseptal-Neo bis-muthe; Rectoseptal-Neo simple; Sedotussin†; **Thai.:** Antust; D-Coate; Dexpin; Dextro BS; Fartussin; Med-Guaiphan†; Mila-Tercon; Muco-DX; Roccal; Seco; Stocof; Terco-C; Terco-D; **UK:** Original Cabdrivers Expectoant; **Venez.:** Codoform†; Derpinol†.

The symbol † denotes a preparation no longer actively marketed