reverse the effects of competitive muscle relaxants (see Neostigmine, p.632). The dose is glycopyrronium bromide 200 micrograms intravenously per 1 mg of neostigmine (or per 5 mg of pyridostigmine); alternatively, it may be given in a dose of 10 to 15 micrograms/kg intravenously with neostigmine 50 micrograms/kg. A suggested dosage for neonates and children is 10 micrograms/kg intravenously with neostigmine 50 micrograms/kg. Glycopyrronium bromide can be given mixed in the same syringe with the anticholinesterase, and it has been suggested that greater cardiovascular stability results from use in this way.

Gastrointestinal disorders. Antimuscarinics, including glycopyrronium bromide, have a limited role as antispasmodics (see p.1692), and have been used as adjuncts in the treatment of peptic ulcer disease (see p.1702).

As an adjunct in the treatment of peptic ulcer disease the usual initial dose of glycopyrronium bromide has been 3 to 6 mg daily by mouth in divided doses adjusted according to response to a maximum of 8 mg daily; a maintenance dose of 1 mg twice daily is often adequate. Doses of 100 to 200 micrograms have been given by intramuscular or intravenous injection.

Hyperhidrosis. Adverse effects generally preclude oral use of antimuscarinics for the management of hyperhidrosis (p.1580), but glycopyrronium, has been applied topically as an alternative to aluminium salts.

In studies involving 22 patients with the Frey syndrome (localised flushing and sweating on eating) glycopyrronium bromide as 1 and 2% cream or roll-on solution gave good control of symptoms;[1] patients tended to prefer the roll-on lotion as it was easier to apply. Topical hyoscine as 0.25, 1, or 3% solution or cream also gave control of sweating, but was associated with a much higher incidence of adverse effects. Patients with diabetic gustatory sweating have also noted a reduction in the frequency and severity of episodes after applying glycopyrronium 0.5% cream.[2]

Glycopyrronium bromide has also been used as a 0.05% solution in the iontophoretic treatment of hyperhidrosis.

1. Hays LL, *et al*. The Frey syndrome: a simple, effective treatment. *Otolaryngol Head Neck Surg* 1982; **90:** 419–25.
2. Shaw JE, *et al.* A randomised controlled trial of topical glycopyrrolate, the first specific treatment for diabetic gustatory sweating. *Diabetologia* 1997; **40:** 299–301.

Palliative care. Glycopyrronium bromide is used in palliative care as an alternative to hyoscine to reduce excessive respiratory secretions. A dose of 200 micrograms may be given subcutaneously or intramuscularly every 4 hours. Alternatively, a dose of 0.6 to 1.2 mg may be given by continuous subcutaneous infusion over 24 hours.

Respiratory-tract disorders. Antimuscarinics have potent bronchodilatory activity and some, such as ipratropium (p.1124), may be used in the management of reversible airways obstruction. Glycopyrronium has been studied, although it is not one of the preferred drugs.

References.

1. Schroeckenstein DC, *et al*. Twelve-hour bronchodilation in asthma with a single aerosol dose of the anticholinergic compound glycopyrrolate. *J Allergy Clin Immunol* 1988; **82:** 115–19.
2. Gilman MJ, *et al*. Comparison of aerosolized glycopyrrolate and metaproterenol in acute asthma. *Chest* 1990; **98:** 1095–8.
3. Cydulka RK, Emerman CL. Effects of combined treatment with glycopyrrolate and albuterol in acute exacerbation of chronic obstructive pulmonary disease. *Ann Emerg Med* 1995; **25:** 470–3.

Preparations

USP 31: Glycopyrrolate Injection; Glycopyrrolate Tablets.

Proprietary Preparations (details are given in Part 3)
Arg.: Acpan; ***Austral.:*** Robinul; ***Austria:*** Robinul; ***Belg.:*** Robinul; ***Denm.:*** Robinul; ***Fin.:*** Robinul; ***Ger.:*** Robinul; ***Hong Kong:*** Robinul†; ***Norw.:*** Robinul; ***NZ:*** Robinul; ***S.Afr.:*** Robinul; ***Swed.:*** Robinul; ***UK:*** Robinul; ***USA:*** Robinul.

Multi-ingredient: ***Fin.:*** Gastrodyn comp.

Used as an adjunct in: ***Belg.:*** Robinul-Neostigmine; ***Denm.:*** Robinul-Neostigmin; ***Fin.:*** Glycostigmin; Robinul-Neostigmin; ***Norw.:*** Robinul-Neostigmin; ***Swed.:*** Robinul-Neostigmin; ***Switz.:*** Robinul-Neostigmine; ***UK:*** Robinul-Neostigmine.

Glycyrrhizic Acid

Glycyrrhizin; Glycyrrhizinic Acid.

$C_{42}H_{62}O_{16}$ = 822.9.

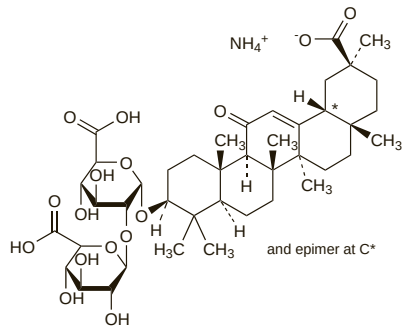
CAS — 1405-86-3.

Ammonium Glycyrrhizate

Ammonii glycyrrhizas; Ammonium, glycyrrhizate d'; Ammonium Glycyrrhizinate; Ammónium-glicirrizát; Ammoniumglycyrrhizat; Ammoniumglykyrritsaatti; Amonio glicirizatas; Amonium-glycyrrhizát; Glycyrram; Monoammonium Glycyrrhizinate.

$C_{42}H_{65}NO_{16}$ = 840.0.

CAS — 53956-04-0.



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

Ph. Eur. 6.2 (Ammonium Glycyrrhizate). A white or yellowish-white, hygroscopic powder. Slightly soluble in water; very slightly soluble in alcohol; practically insoluble in acetone. It dissolves in dilute solutions of acids and of alkali hydroxides. Store in airtight containers.

Dipotassium Glycyrrhizate

Potassium Glycyrrhizinate.

$C_{42}H_{60}K_2O_{16}$ = 899.1.

CAS — 68039-19-0 (potassium glycyrrhizate); 42294-03-1 (monopotassium glycyrrhizate); 68797-35-3 (dipotassium glycyrrhizate);.

Profile

Glycyrrhizic acid is a constituent of liquorice (p.1740). The mild anti-inflammatory and mineralocorticoid properties of liquorice have been attributed to the presence of glycyrrhizic acid and its metabolite glycyrrhetinic acid (Enoxolone, p.50).

Glycyrrhizic acid and its ammonium and potassium salts have been used in products promoted for the relief of coughs, viral infections, and gastrointestinal, liver, and skin disorders. Ammonium glycyrrhizate has also been used as a sweetener, flavour enhancer, and as an emulsifying and gel-forming agent in foodstuffs and cosmetics.

Other derivatives of glycyrrhizic acid discussed elsewhere include metoclopramide glycyrrhizinate (p.1749) and enoxolone (p.50).

Preparations

Proprietary Preparations (details are given in Part 3)
Arg.: Epigen; ***Indon.:*** Neo-Minophagen C; ***Jpn:*** Neo-Minophagen C; ***Mex.:*** Epigen; ***Rus.:*** Epigen (Эпиген).

Multi-ingredient: ***Austria:*** Enicul; ***Fr.:*** Keracnyl stop bouton; Topialyse Fluide; Topialyse Plus; ***Ital.:*** Biothymus DS; ***Jpn:*** Colgen Kowa Bien Soft Mini; ***Mex.:*** Bexident Pediatrics†; ***Port.:*** Alkagin; Bexident.

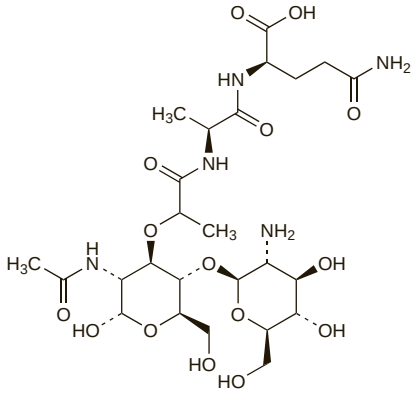
GMDP

Glucosaminylmuramyl Dipeptide. *N*-acetylglucosaminyl-β1-4-*N*-acetylmuramyl-alanyl-D-isoglutamine.

ГМДП

$C_{25}H_{43}N_5O_{15}$ = 653.6.

CAS — 97590-38-0.



Profile

GMDP, a component of bacterial cell walls, is reported to have immunomodulator properties and is used in a wide range of diseases stated to be associated with secondary immunodeficiency.

Preparations

Proprietary Preparations (details are given in Part 3)
Rus.: Licopid (Ликопид).

Gold

Aurum; E175; Or; Oro.

Au = 196.966569.

CAS — 7440-57-5.

Profile

Gold is a bright-yellow, malleable, and ductile metal; the finely divided powder may be black, ruby, or purple. The main use of metallic gold in health care is now in dentistry. Gold may also be used as a colouring agent for some foodstuffs. In the treatment of rheumatoid arthritis, gold is used in the form of compounds such as auranofin (p.25), aurothioglucose (p.26), and sodium aurothiomalate (p.122). The radionuclide gold-198 is described in the chapter on radiopharmaceuticals (p.2053). There have been rare reports of hypersensitivity reactions to metallic gold.

Homoeopathy. Gold has been used in homoeopathic medicines under the following names: Aurum; Aurum met.; Aurum metallicum; Aur. met.

◊ References.

1. Merchant B. Gold, the noble metal and the paradoxes of its toxicology. *Biologicals* 1998; **26:** 49–59.
2. Ehrlich A, Belsito DV. Allergic contact dermatitis to gold. *Cutis* 2000; **65:** 323–6.

Preparations

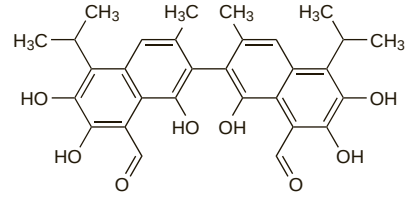
Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***Ger.:*** Cefassin†.

Gossypol

Gosipol. 2,2′-Bis(1,6,7-trihydroxy-3-methyl-5-isopropylnaphthalene-8-carboxaldehyde).

$C_{30}H_{30}O_8$ = 518.6.

CAS — 303-45-7.



Profile

Gossypol is a pigment extracted from cottonseed oil (p.2288). It possesses antispermatogenic activity and has been studied, especially in China, as a male contraceptive. It has also been investigated for its antineoplastic, antiprotozoal, antiviral, and spermicidal activity and has been studied in women in the treatment of gynaecological disorders.

Adverse effects have included fatigue, changes in appetite, gastrointestinal effects, burning sensation of the face and hands, some loss of libido, and persistent oligospermia. Hypokalaemia has occurred.

◊ The pharmacology and therapeutic potential of gossypol have been reviewed.[1] Although controlled studies[2,3] have shown gossypol to be an effective male contraceptive, WHO concluded[4] that gossypol would not be acceptable as a male antifertility drug because of the occurrence of adverse effects such as hypokalaemia and irreversible testicular damage resulting in azoospermia or severe oligozoospermia.

1. Wu D. An overview of the clinical pharmacology and therapeutic potential of gossypol as a male contraceptive agent and in gynaecological disease. *Drugs* 1989; **38:** 333–41.
2. Coutinho EM, *et al*. Antispermatogenic action of gossypol in men. *Fertil Steril* 1984; **42:** 424–30.
3. Liu G, *et al*. Clinical trial of gossypol as a male contraceptive drug part I: efficacy study. *Fertil Steril* 1987; **48:** 459–61.
4. Waites GMH, *et al*. Gossypol: reasons for its failure to be accepted as a safe, reversible male antifertility drug. *Int J Androl* 1998; **21:** 8–12.

Grape

Grapevine; Rebe; Vigne Rouge; Weinstock.

NOTE. Distinguish from grape bark, Cocillana, p.1554.

Pharmacopoeias. *Fr.* includes Red Vine Extract (Extrait de Vigne Rouge (Sec)), prepared from the leaves.

Profile

The seeds and the leaves of the grape, *Vitis vinifera* (Vitaceae), are used in herbal medicine. The dried fruit (raisins) have laxative and demulcent properties.

Many parts of the plant including the fruit skin, seeds, and leaves are used. Both dietary sources and various extracts are promoted for their antoxidant properties in venous insufficiency and capillary impairment, and it has been suggested that they may protect against atherosclerosis.

A standardised red vine leaf extract (AS-195) has been given for the management of chronic venous insufficiency.

Grape seed and grape seed extracts have been included in preparations for peripheral vascular disorders and venous insufficiency and for prophylaxis of cardiovascular disorders. Extracts of grape seed proanthocyanidins, including IH636, are being investigated for a range of other disorders in which antoxidant and free-radical scavenging activity is thought to be beneficial, including cancer prevention, hepatic disorders, radiation-induced fibrosis, cataracts, and macular degeneration, although there is currently little evidence of effectiveness.

Resveratrol, a compound present in grapes, (see p.2378) is also promoted as an antoxidant.

Grape seed oil is included in topical preparations.

The fresh and dried fruits of the grape and the leaves are used as foodstuffs.

◊ Review.

1. Bombardelli E, Morazzoni P. Vitis vinifera L. *Fitoterapia* 1995; **66:** 291–317.

Preparations

Proprietary Preparations (details are given in Part 3)
Arg.: Viticalm; ***Austria:*** Antistax; Pedopur; ***Braz.:*** Celox; Radifree; Vinera; Vitium†; ***Chile:*** Endotelon; Juvenit†; Uvanox; ***Cz.:*** Antistax; Endotelon†; ***Fr.:*** Endotelon; ***Ger.:*** Antistax; ***Hung.:*** Endotelon; ***Ital.:*** Antistax; ***Pol.:*** Endotelon; ***Spain:*** Antistax; ***Switz.:*** Antistax; ***UK:*** Antistax.

Multi-ingredient: ***Austral.:*** Anthogenol; Antioxidant Forte Tablets; Bioglan Pygno-Vite; Bioglan Zellulean with Escin; Lifechange Multi Plus Antioxidant†; Pykno†; Vitanox; ***Austria:*** Hepatodoron; ***Canad.:*** Glucosamine Joint & Muscle Cream with MSM†; ***Chile:*** Celltech Gold; ***Fr.:*** A-Flam; D'Contract; Detoxell; Ditavene; Flebior; Jouvence de l'Abbe Soury†; Mediflor Tisane Circulation du Sang No 12; Ophtalmine; Opo-Veinogene; Phlebosedol†; Veinophytum†; ***Ger.:*** Hepatodoron; ***Hong Kong:*** Proflavanol†; ***Indon.:*** Lanaven Plus; Lycoq; Resvica; ***Ital.:*** Angiovein; Capill; Mirtilux; Neosulfur; Venalta; ***Malaysia:*** Proflavanol; ***Mex.:*** Proflavanol; ***S.Afr.:*** Hepatodoron; ***Singapore:*** Proflavanol; ***Switz.:*** Kawaform†; ***UK:*** Atopiclair; Xclair; ***USA:*** Atopiclair; Pycnogenol Plus.

Gravel Root

Joe Pye Weed; Queen of the Meadow; Raíz de eupatorio.

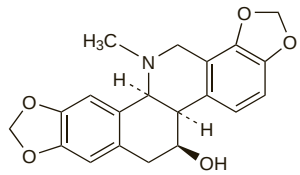
Profile
Gravel root is the root of *Eupatorium purpureum* (Compositae) and has diuretic, antilithic, and antirheumatic properties. It is used for renal and urinary calculus and other urinary-tract disorders, and has also been used for gout and rheumatism.

Preparations

Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***UK:*** Backache.

Greater Celandine

Celidonia; Chélidoine; Chelidonii herba; Chelidonium; Keltamo; Schöllkraut; Skelört; Tetterwort; Ugniažolių žolė; Vérehulló fecskefű; Vlašťovičníková vňať; Ziele glistnika.



(+)-form

(chelidonine)

Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Greater Celandine). The dried, whole, or cut aerial parts of *Chelidonium majus* collected during flowering. It contains a minimum of 0.6% of total alkaloids expressed as chelidonine ($C_{20}H_{19}NO_5$ = 353.4), calculated with reference to the dried drug.

Profile
Greater celandine has sedative and spasmolytic properties and the aerial parts are used for liver, biliary, and gastrointestinal disorders, and have also been used for respiratory-tract disorders. The latex has been used externally for warts and other skin conditions.

It has been reported to cause hepatotoxicity.

Homoeopathy. Greater celandine has been used in homoeopathic medicines under the following names: Chelidonium; Chelidonium majus; Chelidonium, Flos; Chelidonium majus e floribus; Che. maj.

Effects on the liver. References.

1. Benninger J, *et al.* Acute hepatitis induced by greater celandine (Chelidonium majus). *Gastroenterology* 1999; **117:** 1234–7.
2. Stickel F, *et al.* Acute hepatitis induced by Greater Celandine (Chelidonium majus). *Scand J Gastroenterol* 2003; **38:** 565–8.

Preparations

Proprietary Preparations (details are given in Part 3)
Ger.: Aristochol CC†; Cholarist; Cholspasmin Phyto†; Gallopas†; Paversyat forte N; ***Switz.:*** Virulex.

Multi-ingredient: ***Arg.:*** Quelodin F; ***Austral.:*** Berberis Complex; Extralife Liva-Care; Lexat†; Livstim†; Livton Complex†; ***Austria:*** Choleodoron; ***Belg.:*** Aporil; ***Braz.:*** Quelodin†; ***Cz.:*** Iberogast; ***Fr.:*** Nitrol; ***Ger.:*** Aristochol N†; Aristochol†; Chol-Kugeletten Neu; Cholagogum F†; Cholagogum N†; Cholagutt-N†; Cholhepan N; Cholosom Phyto N; Cholosom SL†; Cynarzym N†; Femisana†; Gallemolan forte; Gallemolan G†; Galloselect M†; Hepaticum-Medice H†; Horvilan N; Iberogast; Infi-tract†; Marianon†; Nervogastrol N†; Neurochol C†; Opobyl-phyto†; Presselin Hepaticum P†; Schwohepan S†; spasmo gallo sanol†; ***Hong Kong:*** Hepatofalk; Hepatofalk Planta; ***Indon.:*** Lanagogum; ***Pol.:*** Artecholin; Artecholwex; Chelicur; Cholavisol; Cholitol; Enterosol; Neoazarina; Sirupus Pini Compositus; Sirupus Tussipini; Sirupus Tussipini D; ***Port.:*** Cholagutt†; ***S.Afr.:*** Choleodoron; ***Singapore:*** Hepatofalk Planta; ***Spain:*** Menstrunat†; Natusor Hepavesical†; Nitroina; ***Switz.:*** Choleodoron†; Demonatur Gouttes pour le foie et la bile; Iberogast; Stago N†; ***Venez.:*** Demerung.

Green-lipped Mussel

Extracto de mejillón de labios verdes.

Зеленого Губчатого Моллюска

Profile
An extract from the green-lipped mussel *Perna canaliculus* (Mytilidae), stated to contain omega-3 polyunsaturated fatty acids, amino acids, fats, carbohydrates, and minerals, has been promoted for the treatment of rheumatic disorders including rheumatoid arthritis (p.11). It has also been tried in asthma.

Rheumatic disorders. Reviews of the investigation of green-lipped mussel in the treatment of arthritis have not revealed conclusive evidence of its usefulness.[1,2]

1. Li Wan Po A, Maguire T. Green-lipped mussel. *Pharm J* 1990; **244:** 640–1.
2. Cobb CS, Ernst E. Systematic review of a marine nutriceutical supplement in clinical trials for arthritis: the effectiveness of the New Zealand green-lipped mussel *Perna canaliculus*. *Clin Rheumatol* 2006; **25:** 275–84.

Preparations

Proprietary Preparations (details are given in Part 3)
Austral.: Lyprinol; ***UK:*** Healtheries Musseltone; Lyprinol; Mobilyzer; Oceantone; Seatone; Supplex.

Multi-ingredient: ***Austral.:*** Prost-1†; ***Ital.:*** Osteoclar; ***UK:*** Healtheries Musseltone & Glucosamine.

Griffonia Simplicifolia

Profile
The leaf, stem, and twigs of *Griffonia simplicifolia* (Fabaceae) have been used for a variety of disorders in its native West Africa. It is included in herbal and nutritional supplements. It is a source of lectins and has insecticidal properties.

Preparations

Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***Fr.:*** Prosatietil†; Tryptonat; ***Ital.:*** Brioplus; Calmason; Climil Complex.

Grindelia

Gum Plant; Gumweed; Tar Weed.

Pharmacopoeias. In *Fr.* which allows *Grindelia camporum*, *G. humilis*, *G. robusta*, and *G. squarrosa*.

Profile
Various *Grindelia* spp. (Asteraceae) have been included in herbal preparations used for respiratory-tract disorders.

Homoeopathy. Grindelia has been used in homoeopathic medicines under the following names: Grindelia robusta; Grind. ro.

Preparations

Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***Arg.:*** Expectosan Hierbas y Miel; ***Austral.:*** Asa Tones; Euphorbia Complex; ***Austria:*** Paracodin; ***Braz.:*** Calmatoss†; Gotas Nican†; Infantoss†; Limao Bravo†; Pectal†; Xarope de Caraguata†; Xarope Peitoral de Ameixa Composto†; Xpe SPC†; ***Canad.:*** Herbal Cold Relief†; ***Chile:*** Gotas Nican†; Ramistos; ***Cz.:*** Bronchicum Elixir†; Bronchicum Hustensirup†; ***Fr.:*** Coquelusedal; Coquelusedal Paracetamol; Dinacode†; Ephydion; Germose†; Neo-Codion; Vegetoserum; ***Ger.:*** Asthma 6-N†; Bronchicum Elixir N†; ***Indon.:*** Pectum; ***Ital.:*** Broncosedina; Tussanyl; ***Neth.:*** Bronchicum; ***Pol.:*** Bronchicum Eliksir; Echinasal; ***Rus.:*** Bronchicum (Бронхикум); Bronchicum Husten (Бронхикум Сироп от Кашля); Neo-Codion (Нео-Кодион); Neo-Codion Babies (Нео-Кодион Для Младенцев); ***S.Afr.:*** Bronchicough†; Bronchicum†; ***Spain:*** Pazbronquial; ***Switz.:*** Famel; Neo-Codion N; Nican; ***Venez.:*** Novacodin.

Ground Ivy

Ale-hoof; Gundelrebe; Gundermann; Hiedra terrestre; Lierre Terrestre.

Pharmacopoeias. In *Chin.* and *Fr.*

Profile
Ground ivy, the aerial parts of *Glechoma hederacea* (*Nepeta hederacea*) (Labiatae) has been used for respiratory-tract and gastrointestinal disorders.

Homoeopathy. Ground ivy has been used in homoeopathic medicines.

Preparations

Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***UK:*** Gerard House Water Relief Tablets; Water Naturtabs.

Guaiacum Resin

Guaiac; Guaiacum; Guajakharz; Gwajakowa żywica; Resina de guayaco.

CAS — 9000-29-7.

Profile
Guaiacum resin is obtained from guaiacum wood (lignum vitae; *Guaiacum officinale* or *G. sanctum*) (Zygophyllaceae) and has been used in the treatment of rheumatism. It is used in herbal medicine.

Guaiacum resin is used in the detection of occult blood in the faeces. The accuracy of the guaiacum test has been questioned and some drugs may interfere with the result.

Homoeopathy. Guaiacum resin has been used in homoeopathic medicines under the following names: Guaiacum; Guajacum; Guaic.

◊ References.

1. Ko CW, *et al.* Fecal occult blood testing in a general medical clinic: comparison between guaiac-based and immunochemical-based tests. *Am J Med* 2003; **115:** 111–14.

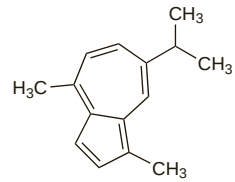
Preparations

Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***Austral.:*** Boswellia Compound; Guaiacum Complex†; ***Switz.:*** Pommade au Baume; ***UK:*** Gerard House Reumalex; Rheumatic Pain; Rheumatic Pain Relief; Rheumatic Pain Remedy.

Guaiazulene

Gayazulen; Guayazuleno; Gwajazulen. 1,4-Dimethyl-7-isopropylazulene.

$C_{15}H_{18}$ = 198.3.
CAS — 489-84-9.
ATC — S01XA01.
ATC Vet — QS01XA01.



Profile
Guaiazulene has been reported to have anti-allergic, anti-inflammatory, antipyretic, and antiseptic properties.

Preparations

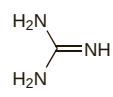
Proprietary Preparations (details are given in Part 3)
Arg.: Azulon; ***Austria:*** Azulen; Azulenal; Garmastan; ***Cz.:*** Garmastan†; Ophthalmo-Azulen; ***Fr.:*** Azulene†; ***Hung.:*** Azulenol; ***Turk.:*** Garmastan.

Multi-ingredient: ***Arg.:*** Sodorant; ***Austria:*** Piniment; Spasmo Claim; Tampositorien mit Belladonna; Thrombocid; ***Cz.:*** Dermazulen; Ophthalmo-Septonex; Pinosol; Pityol; Vitazulen†; ***Fr.:*** Cicatryl; Pepsane; ***Ger.:*** Azupanthenol†; Thrombocid; ***Hong Kong:*** Thrombocid; ***Israel:*** Aronal Forte; ***Ital.:*** Collyria†; ***Mex.:*** Pepsane; ***Pol.:*** Pinosol; ***Port.:*** Thrombocid; ***Rus.:*** Pinosol (Пиносол); ***Spain:*** Predni Azuleno; ***Switz.:*** Bain extra-doux dermatologique; Thrombocid.

Guanidine Hydrochloride

Carbamidine Hydrochloride; Guanidina, hidrocloruro de; Guanidyny chlorowodorek; Iminourea Hydrochloride.

CH_5N_3,HCl = 95.53.
CAS — 113-00-8 (guanidine); 50-01-1 (guanidine hydrochloride).



(guanidine)

Profile
Guanidine hydrochloride enhances the release of acetylcholine from nerve terminals. It has been given by mouth to reverse neuromuscular blockade in patients with botulism (p.2207), but its efficacy has not been established. Guanidine hydrochloride has also been tried in Eaton-Lambert myasthenic syndrome (p.629)