

2. Murdoch D, *et al.* Acanthamoeba keratitis in New Zealand, including two cases with *in vivo* resistance to polyhexamethylene biguanide. *Aust N Z J Ophthalmol* 1998; **26**: 231–6.
3. Seal DV. Acanthamoeba keratitis update—incidence, molecular epidemiology and new drugs for treatment. *Eye* 2003; **17**: 893–905.

Adverse effects. A systemic allergic reaction in a patient after use of a topical antiseptic cream was confirmed, by skin prick tests, to be caused by hexamidine.¹

1. Mullins RJ. Systemic allergy to topical hexamidine. *Med J Aust* 2006; **185**: 177.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Desomedine†; **Belg.:** Hexomedine; Ophthamedine; **Fr.:** Desomedine; Hexaseptine; Hexomedine; **Ger.:** Hexomedin N†; Laryngomedin N; **Singapore:** Desomedine; **Spain:** Hexomedin; **Switz.:** Desomedine; **Venez.:** Hexomedine.

Multi-ingredient: **Austral.:** Medi Creme; Medi Pulv; **Belg.:** Colludol; **Braz.:** Hexomedine; **Cz.:** Cyteal; Imacort; Imazol Plus; **Fr.:** Aungoutte; Colludol; Cyteal; Hexomedine†; Oromedine; Otomid; Pulvo 47†; Solutincine Maux de Gorge; **Ger.:** Imazol; Imazol comp; Pulvo; **Gr.:** Ocretre; **Hong Kong:** Medicreme; Medipulv†; **NZ:** Medicreme; Medipulv; **Port.:** Cyteal; **Rus.:** Cyteal (Цитреал); **Singapore:** Cyteal; **Spain:** Tantum; **Switz.:** Imacort; Imazol; **Thai.:** Pulvo 47; **Turk.:** Imazol; Pulvo 47; **UK:** Cyteal.

Hexetidine (BAN, rINN)

Heksetidiini; Heksetidin; Heksetidinas; Hexetidini; Hexetidina; Hexétidine; Hexetidinum. 5-Amino-1,3-bis(2-ethylhexyl)hexahydro-5-methylpyrimidine.

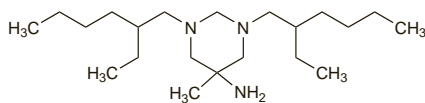
Гексэтидин

$C_{21}H_{45}N_3 = 339.6$.

CAS — 141-94-6.

ATC — A01AB12.

ATC Vet — QA01AB12.



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

Ph. Eur. 6.2 (Hexetidine). An oily, colourless or slightly yellow liquid. Very slightly soluble in water; very soluble in alcohol, in acetone, and in dichloromethane. It dissolves in dilute mineral acids. Protect from light.

Adverse Effects

Allergic contact dermatitis, alterations in taste, and transient anaesthesia have occasionally been reported.

Uses and Administration

Hexetidine is a bactericidal and fungicidal antiseptic. It is used for minor infections of mucous membranes, and in particular as a 0.1% mouthwash for local infections and oral hygiene.

Oral hygiene. A mouthwash containing 0.1% hexetidine was no more effective than placebo in the management of patients with aphthous ulceration (see Mouth Ulceration, p.1700) and provided no additional benefits to oral hygiene or gingival health.¹ However, such a mouthwash does appear to be of benefit in reducing supragingival plaque and gingival inflammation.²

1. Chadwick B, *et al.* Hexetidine mouthrinse in the management of minor aphthous ulceration and as an adjunct to oral hygiene. *Br Dent J* 1991; **171**: 83–7.
2. Sharma NC, *et al.* Antiplaque and antigingivitis effectiveness of a hexetidine mouthwash. *J Clin Periodontol* 2003; **30**: 590–4.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Duranil; **Austria:** Hexoral; Isozid-H; **Belg.:** Hextril; **Canad.:** Steri/Sol; **Chile:** Duranil; Muramyl†; **Cz.:** Dr Rentschler Rachenspray†; Dr Rentschler Rachenspungung†; **Fr.:** Collu-Hextril; Hextril; **Ger.:** Doreperol N†; Hexoral; Vagi-Hex; **Gr.:** Hexalen; Irin; **Hong Kong:** Bactidol†; Bactidol; Hexadol; **Irl.:** Oraldene; **Ital.:** Oraseptic; **Malaysia:** Bactidol†; **Neth.:** Hextril; **Philipp.:** Bactidol; **Port.:** Collu-Hextril; Hextril; **Rus.:** Hexoral (Гексорал); Stomatidine (Стоматидин); **S.Afr.:** Oraldene; **Singapore:** Bactidol; **Spain:** Hextril; **Switz.:** Drossadin; Hextril; Vagi-Hex; **Turk.:** Heksoral; Helkzoton; **UK:** Oraldene; **Venez.:** Oraldine†.

Multi-ingredient: **Arg.:** Buchex; Mantus; Pentadent†; **Austria:** Gurifx; **Belg.:** Givalex; **Cz.:** Stopangin; **Fr.:** Givalex; **Ger.:** Givalex†; **Hong Kong:** Anso; **Rus.:** Stopangin (Стопангин); **Spain:** Abrasone Rectal; Mentamida.

Hexylresorcinol (BAN)

Esilresorcina; Heksilrezorciniolis; Heksylresorsiniolis; Hexilresorcinol; Hexilrezorciniol; Hexylresorcinolum; Hexylresorc; Heksylrésorciniol; Heksylresorcinolum. 4-Hexylbenzene-1,3-diol.

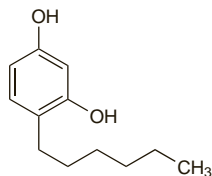
$C_{12}H_{18}O_2 = 194.3$.

CAS — 136-77-6.

ATC — R02AA12.

ATC Vet — QR02AA12.

The symbol † denotes a preparation no longer actively marketed



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

Ph. Eur. 6.2 (Hexylresorcinol). A colourless, yellowish or reddish crystalline powder or needles, turning brownish-pink on exposure to light or air. It exhibits polymorphism. M.p. 66° to 68°; melting may occur at about 60° followed by solidification and a second melting at 66° to 68°. Very slightly soluble in water; freely soluble in alcohol and in dichloromethane. Store in airtight containers. Protect from light.

USP 31 (Hexylresorcinol). M.p. 62° to 67°. Store in airtight containers. Protect from light.

Incompatibility. Hexylresorcinol is incompatible with alkalies and oxidising agents.

Profile

Hexylresorcinol is a phenolic antiseptic that is used topically for the treatment of minor infections of the skin and mucous membranes, and in the form of lozenges for the treatment of sore throat. It has also been used in vaginal spermicidal preparations.

High concentrations of hexylresorcinol are irritant and corrosive to skin and mucous membranes. Alcoholic solutions are vesicant.

It was formerly used as an anthelmintic.

Preparations

USP 31: Hexylresorcinol Lozenges.

Proprietary Preparations (details are given in Part 3)

Austral.: Nyal Medthroat Anaesthetic Lozenges†; Strepsils Extra; **Canad.:** Antiseptic Throat Lozenges; Bradosol; Bronchodex Pastilles Antiseptiques; Soothe Aid; Strepsils Anaesthetic Formula; Screts Extra Strength; **Cz.:** Strepsinol; **Irl.:** Strepsils Extra; **Israel:** Screts†; **Malaysia:** Strepsils Pain Relief; **Singapore:** Strepsils Pain Relief; **UK:** Benlyn Sore Throat Lozenge†; Halls Soothers Triple Action; Lemsip Sore Throat; Soothers Triple Action; Strepsils Extra; TCP; **USA:** ST 37; Screts Original Formula Sore Throat Original Mint.

Multi-ingredient: **Arg.:** Algident; Apracur; Bucofaringeo†; Bagoiletas sin Anestesia†; Balsamina; Caramelos Antibioticos; Caramelos Antibioticos Bucoging†; Caramelos Antibioticos Lemfar; Caramelos Oriental; Collubiazol; Dotrin; Fanaletas; Fungicida†; Ixana; No-Tos Adultos; No-Tos Pocket; Pastillas Medex; Refenax Caramelos Expectoantes; Suavisan N; Suavisant†; **Braz.:** Andriodermol; Micoz†; **Chile:** Fittig; Lady Fittig†; **Cz.:** Coldrex Lary-plus; **Ger.:** Hexamon; Mycatox†; **Hung.:** Coldrex Laryplus†; **India:** Tytin; **Ital.:** Golamed Due†; **Pol.:** Coldrex; **UK:** Beechams Max Strength Sore Throat Relief; Beechams Throat-Plus.

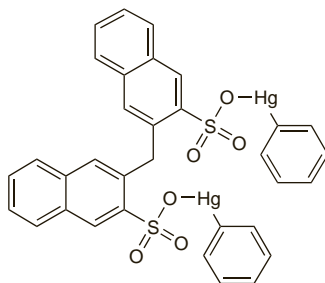
Hydrargaphen (BAN, rINN)

Hidrargafeno; Hydraphen; Hydrargaphène; Hydrargaphenum; Hygraphen; Phenylmercuric Dinaphthylmethanedisulfonate. μ -(2,2'-Binaphthalene-3-sulphonyloxy)bis(phenylmercury).

Гидраргафен

$C_{33}H_{24}Hg_2O_6S_2 = 981.9$.

CAS — 14235-86-0.



Profile

Hydrargaphen is a mercurial antiseptic with antibacterial and antifungal properties. It has been used in the treatment of vaginitis, wounds, burns, and infections of the skin.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Hong Kong:** Penotran†.

Hydrogen Peroxide

Hidrojen Peroksid; Hydrogène, peroxyde d'; Hydrogenii peroxidum; Peróxido de hidrógeno.

Перекись Водорода

$H_2O_2 = 34.01$.

CAS — 7722-84-1.

ATC — A01AB02; D08AX01; S02AA06.

ATC Vet — QA01AB02; QD08AX01; QS02AA06.

NOTE. The BP 2008 directs that when Hydrogen Peroxide is prescribed or demanded, Hydrogen Peroxide Solution (6 per cent) shall be dispensed or supplied.

Incompatibility. Hydrogen peroxide solutions are incompatible with reducing agents, including organic matter and oxidisable substances, and with some metals, metallic salts, alkalis, iodides, permanganates, and other stronger oxidising agents.

Stability. Aqueous solutions of hydrogen peroxide gradually decompose on standing and if allowed to become alkaline. Decomposition is increased by light, agitation, and heat. Incompatibility may also produce decomposition. Solutions are comparatively stable in the presence of a slight excess of acid. Strong solutions are considered to be more stable than weak solutions.

Storage. Solutions of hydrogen peroxide should be stored in airtight containers at 15° to 30° (but see Hydrogen Peroxide Solution (30 per cent), below). Solutions should not be stored for long periods. Those not containing a stabiliser should be stored at a temperature not exceeding 15°. Protect from light.

Hydrogen Peroxide Solution (3 per cent)

3%-os hidrogén-peroxid-oldat; Dilute Hydrogen Peroxide Solution; Hydrogen Peroxide Solution (10-volume); Hydrogen Peroxide Topical Solution; Hydrogenii Peroxidum 3%; Hydrogenii Peroxidum 3 Per Centum; Oxydol; Peroxid vodiku 3%; Peróxido de hidrógeno, solución al 3%; Vandeniio peroksido 3% tirpalas; Väteperoxid 3%; Vetyperoksidi 3%; Wodoru natltenek 3%.

ATC — A01AB02; D08AX01; S02AA06.

ATC Vet — QA01AB02; QD08AX01; QS02AA06.

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

Ph. Eur. 6.2 (Hydrogen Peroxide Solution (3 per cent)). A clear colourless liquid containing 2.5 to 3.5% w/w of H_2O_2 corresponding to about 10 times its volume of oxygen. It decomposes in contact with oxidisable organic matter and with certain metals and if allowed to become alkali. It may contain a suitable stabilising agent. Solutions not containing a stabilising agent should be stored at a temperature below 15°. Protect from light.

The BP 2008 directs that when Hydrogen Peroxide is prescribed or demanded, Hydrogen Peroxide Solution (6 per cent) shall be dispensed or supplied.

USP 31 (Hydrogen Peroxide Topical Solution). It contains 2.5 to 3.5% w/v of H_2O_2 . It may contain up to 0.05% of a suitable preservative or preservatives. Store in airtight containers at a temperature between 15° and 30°. Protect from light.

Hydrogen Peroxide Solution (6 per cent)

Hydrog. Perox. Soln; Hydrogen Dioxide Solution; Hydrogen Peroxide Solution; Hydrogen Peroxide Solution (20-volume); Liq. Hydrog. Perox.; Liqueur Hydrogenii Peroxid; Peróxido de hidrógeno, solución al 6%; Solución de Bióxido de Hidrogeno; Soluté Officiel d'Eau Oxygénée; Wasserstoffsuperoxydlösung.

ATC — A01AB02; D08AX01; S02AA06.

ATC Vet — QA01AB02; QD08AX01; QS02AA06.

Pharmacopoeias. In *Br*.

BP 2008 (Hydrogen Peroxide Solution (6 per cent)). A clear colourless aqueous liquid containing 5.0 to 7.0% w/v of H_2O_2 corresponding to about 20 times its volume of available oxygen. It decomposes in contact with oxidisable organic matter and with certain metals and if allowed to become alkali. It may contain a suitable stabilising agent. It should not be stored for long periods. Solutions not containing a stabilising agent should be stored at a temperature below 15°. Protect from light.

The BP directs that when Hydrogen Peroxide is prescribed or demanded, Hydrogen Peroxide Solution (6 per cent) shall be dispensed or supplied.

Hydrogen Peroxide Solution (27 per cent)

Hydrogenii Peroxidum; Perossido D'Ildrogeno Soluzione; Peróxido de hidrógeno, solución al 27%; Solutio Hydrogenii Peroxydati; Strong Hydrog. Perox. Soln; Strong Hydrogen Peroxide Solution.

ATC — A01AB02; D08AX01; S02AA06.

ATC Vet — QA01AB02; QD08AX01; QS02AA06.

Description. Hydrogen peroxide solution (27 per cent) is a clear, colourless aqueous solution containing 26 to 28% w/w of H_2O_2 , corresponding to about 100 times its volume of available oxygen. It may contain a suitable stabilising agent.