

In ophthalmology, hydroxyamphetamine hydrobromide has been used in a 1% solution as a mydriatic and in the diagnosis of Horner's syndrome.

Preparations

USP 31: Hydroxyamphetamine Hydrobromide Ophthalmic Solution.

Proprietary Preparations (details are given in Part 3)

Cz.: Paredrolon†; **USA:** Paredrine†.

Multi-ingredient: **USA:** Paremyd.

Hydroxyapatite (BAN)

542 (edible bone phosphate); Durapatite (*USAN*); Hidroxiapatito; Hydroxylapatite; Win-40350. Decalcium dihydroxide hexakis(orthophosphate).

$3\text{Ca}_3(\text{PO}_4)_2 \cdot \text{Ca}(\text{OH})_2 = 1004.6$;

$\text{Ca}_5(\text{OH})(\text{PO}_4)_3 = 502.3$.

CAS — 1306-06-5.

Profile

Hydroxyapatite is a natural mineral with composition similar to that of the mineral in bone. Hydroxyapatite for therapeutic purposes is prepared from bovine bone and contains, in addition to calcium and phosphate, trace elements, fluoride and other ions, proteins, and glycosaminoglycans. It is given orally to patients requiring both calcium and phosphorus supplementation. Hydroxyapatite with tricalcium phosphate has been used in bone grafts.

Hydroxyapatite derived from marine coral has been used in the construction of orbital implants for use after surgical removal of the eye. A synthetic calcium hydroxyapatite (CaHA) is used for the correction of facial lipatrophy in patients with HIV infection and as a cosmetic filler for moderate to severe facial wrinkles and folds.

Adverse effects. Reference to problems associated with the use of coral-derived orbital implants¹ and synthetic calcium hydroxyapatite.²

- Shields CL, et al. Problems with the hydroxyapatite orbital implant: experience with 250 consecutive cases. *Br J Ophthalmol* 1994; **78**: 702-6.
- Sankar V, McGuff HS. Foreign body reaction to calcium hydroxyapatite after lip augmentation. *J Am Dent Assoc* 2007; **138**: 1093-96.

Uses. A mixture of calcium phosphates with calcium carbonate could be combined to form a paste which could be injected into acute fractures;¹ under physiological conditions the paste hardened within minutes, due to the formation of dahllite, a carbonated apatite, and held the bones in place as it was progressively replaced by living bone.

- Constantz BR, et al. Skeletal repair by in situ formation of the mineral phase of bone. *Science* 1995; **267**: 1796-9.

Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Ossopan; Osteogenon; **Braz.:** Ossopan; **Cz.:** Osteogenon; **Fr.:** Ossopan; **Ger.:** Calcibon; Endobon; Ossopan†; **Hung.:** Osteogenon; **India:** Ossopan; **Indon.:** Ossopan; Ossoral; **Irl.:** Ossopan; **Ital.:** Apagen; **Mex.:** Ossopan; **Pol.:** Ossopan; Osteogenon; **Port.:** Ossopan; **Rus.:** Osteogenon (Остеогенон); **Singapore:** Ossopan†; **Spain:** Ossopan; Osteopon; **Switz.:** Ossopan; **Thai.:** Ossopan; **UK:** Ossopan†; Osteo Support; **USA:** Radiesse.

Multi-ingredient: **Arg.:** Totalos Plus; **Ger.:** Collapat II; **Malaysia:** Supa Biocal Vitahealth†.

Hydroxymethylnicotinamide

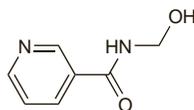
Hidroksimetilnicotinamid; N-Hydroxymethylnicotinamide; Nicotinylmethylamide; Nicotinylmethylamidum; Nikotinylnometyloamid. N-Hydroxymethylpyridine-3-carboxamide.

$\text{C}_7\text{H}_8\text{N}_2\text{O}_2 = 152.2$.

CAS — 3569-99-1.

ATC — A05AB01.

ATC Vet — QA05AB01.



Pharmacopoeias. In Pol.

Profile

Hydroxymethylnicotinamide is a cholagogue and has been used in the treatment of various disorders of the gallbladder.

Preparations

Proprietary Preparations (details are given in Part 3)

India: Bilamide.

Hydroxyquinoline Sulfate

Chinosolum; Hidroksikinolina, sulfato de; Hydroxyquinoline Sulphate; Oksikiniolinisulfaatti; Oxichinolini Sulfas; Oxikiniolinisulfat; Oxine Sulphate; Oxiquinol; Oxiquinoline Sulfate (*USAN*); Sulfate

d'Orthoxyquinoléine. Quinolin-8-ol sulphate; 8-Quinololin sulphate.

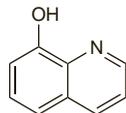
$(\text{C}_9\text{H}_7\text{NO})_2 \cdot \text{H}_2\text{SO}_4 = 388.4$.

CAS — 148-24-3 (*hydroxyquinoline*); 134-31-6 (*hydroxyquinoline sulfate*).

ATC — A01AB07; D08AH03; G01AC30; R02AA14.

ATC Vet — QA01AB07; QD08AH03; QG01AC30;

QR02AA14.



(hydroxyquinoline)

Pharmacopoeias. In Fr. and Swiss. Also in USNF.

USNF 26 (Oxyquinoline Sulfate). A yellow powder. Very soluble in water; slightly soluble in alcohol; practically insoluble in acetone and in ether; freely soluble in methyl alcohol.

Potassium Hydroxyquinoline Sulfate

Oxiquinol potásico; Oxyquinol Potassium; Potassii Hydroxyquinolini Sulphas; Potassium Hydroxyquinoline Sulphate; Potassium Oxyquinoline Sulphate.

CAS — 14534-95-3.

ATC — A01AB07; D08AH03; G01AC30; R02AA14.

ATC Vet — QA01AB07; QD08AH03; QG01AC30; QR02AA14.

Pharmacopoeias. In Br., Fr., and Ger.

BP 2008 (Potassium Hydroxyquinoline Sulphate). An equimolecular mixture of potassium sulfate and quinolin-8-ol sulfate monohydrate. It contains 50.6 to 52.6% of quinolin-8-ol and 29.5 to 32.5% of potassium sulfate, calculated with reference to the anhydrous substance. A pale yellow, odourless or almost odourless, microcrystalline powder. Freely soluble in water; insoluble in ether. On extraction with hot dehydrated alcohol a residue of potassium sulfate and a solution of quinolin-8-ol sulfate are obtained.

Profile

Hydroxyquinoline sulfate and potassium hydroxyquinoline sulfate have antibacterial, antifungal, and deodorant properties, and have been used similarly in the topical treatment of skin, oropharyngeal, and vaginal disorders. Potassium hydroxyquinoline sulfate is often used with benzoyl peroxide.

Derivatives of hydroxyquinoline including the salicylate, benzoate, borate, hydrofluoride, iodochloride, silicofluoride, and sodium hydroxyquinoline sulfate have been used similarly.

Preparations

BP 2008: Potassium Hydroxyquinoline Sulphate and Benzoyl Peroxide Cream.

Proprietary Preparations (details are given in Part 3)

Ger.: Leioderm; **Ital.:** Aftir Shampoo; **Neth.:** Superol.

Multi-ingredient: **Arg.:** Curisept†; **Austral.:** Aci-Jel†; **Belg.:** Aseptosyl†; **Braz.:** Andolba; Cerumim; Colpolase; Lacto Vagin†; Leucocida†; Malvatricin Ginecológico; Malvatricin Pastilhas; Malvatricin Pronto; Malvatricin Solucao para diluir; Malvatricin Spray; Pan-Emecort†; Senof†; **Chile:** Diproquin; **Cz.:** Aviril H†; **Fr.:** Chromargon; Dermacide; Nestosyl; **Ger.:** Chinosol; Leioderm P; **Hung.:** Germicid†; **Irl.:** Quinocort†; Quinoderm; Valderma†; **Ital.:** Disinfene; Ustosian; Viderm†; **NZ:** Aci-Jel†; **Phillip.:** Auralgan; **Port.:** Apyro†; Queimax; **Rus.:** Contraceptin T (Контрацептин Т); **S.Afr.:** Cuticura†; Oto-Horn Forte; Quinoderm; Universal Earache Drops; **Switz.:** Benzocaine PD; Rectoseptal-Neo bismuth; Rectoseptal-Neo simple; **UK:** Quinoderm; Valderma; **USA:** Acid Jelly; Auroguard Otic; Fem pH; Medicine Derma†; Oxyzal; Stypto-Caine; Trimo-San; Triv; **Venez.:** Borogin; Fluquinol†.

Hymecromone (BAN, USAN, rINN)

Himecromona; Himekromon; Himekromonas; Hymecromon; Hymécromone; Hymecromonum; Hymekromon; Hymekromoni; Imecromone; LM-94. 7-Hydroxy-4-methylcoumarin.

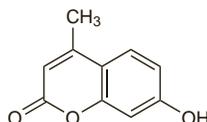
Гимекромон

$\text{C}_{10}\text{H}_8\text{O}_3 = 176.2$.

CAS — 90-33-5.

ATC — A05AX02.

ATC Vet — QA05AX02.



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

Ph. Eur. 6.2 (Hymecromone). An almost white crystalline powder. Very slightly soluble in water; slightly soluble in dichloromethane; sparingly soluble in methyl alcohol. It dissolves in dilute solutions of ammonia. Protect from light.

The symbol † denotes a preparation no longer actively marketed

The symbol ⊗ denotes a substance whose use may be restricted in certain sports (see p.vii)

Profile

Hymecromone is a choleric and biliary antispasmodic. It has been given orally in doses of 400 mg three times daily at meal-times. It has also been given as the sodium salt by slow intravenous injection as an adjunct to diagnostic procedures. Diarrhoea may occasionally occur.

Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Cholonerion; Unichol; **Belg.:** Cantabline; **Cz.:** Cholestil; Isochol; **Fr.:** Cantabline; **Ger.:** Chol-Spasmolletten; Cholspasmin; Gallo Merz Spasmo†; **Gr.:** Cholirene; **Ital.:** Cantablin; **Pol.:** Cholestil; **Rus.:** Odeston (Одестон); **Spain:** Bilicanta†; **Turk.:** Cantabline.

Hyoscyamus

Banotu; Beleño; Bilsenkraut; Bolmört; Giusquiamo; Henbane; Hullukkai; Hyoscy; Hyoscyami; Hyoscyami folium (hyoscyamus leaf); Jusquiamme; Jusquiamme Noire; Jusquiamme noire, feuille de (hyoscyamus leaf); Meimendro.

Pharmacopoeias. *Chin.* specifies only the seeds.

Eur. (see p.vii) includes a form for homeopathic preparations.

Ph. Eur. 6.2 (Hyoscyamus for Homeopathic Preparations; Hyoscyamus Niger ad Praeparationes Homeopathicas). The whole, fresh flowering plant of *Hyoscyamus niger*. Protect from light.

Profile

Hyoscyamus contains the alkaloid hyoscyamine with varying amounts of hyoscyne and has peripheral and central effects similar to those of atropine (p.1219); its preparations have been used mainly for the relief of visceral spasm. The fresh whole flowering plant (*Hyoscyamus niger*) as well as the dried leaves have been used in herbal and medicine.

Homeopathy. Hyoscyamus has been used in homeopathic medicines under the following names: Hyoscyamus leaf; Hyoscyamus niger; Hyos. nig.

Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Kelosoft; **Switz.:** Kelosoft; **Venez.:** Atroveran.

Multi-ingredient: **Arg.:** Hepacur; Trixol†; **Braz.:** Dorveran†; Ductoveran; Espasmalgon†; MM Expectorante; Sedatux†; **Denm.:** Zink-Calmitol†; **Fr.:** Laccoderme à l'huile de cade; **Ger.:** Unguentum lymphaticum; **Switz.:** Cardiodoron†; Drages S contre la toux†; Gouttes contre la toux "S"; Kelméd; Sirop pectoral contre la toux S; Sirop S contre la toux et la bronchite; **UK:** Onopordon Comp B; **Venez.:** Atrobel; Cloverin†; Cratex†; Linfoderm; Neo-Atropan†; Tropifen†.

Hypoglycin A

Hipoglicina A. L-2-Amino-3-(2-methylenecyclopropyl)propionic acid.

$\text{C}_7\text{H}_{11}\text{NO}_2 = 141.2$.

CAS — 156-56-9.

Profile

Hypoglycin A is a toxic substance present in the arillus of unripe ackee (akee), the fruit of *Blighia sapida* (Sapindaceae). It is responsible for Jamaican vomiting sickness, with symptoms of acute and severe vomiting, hypoglycaemia, muscular weakness, CNS depression, convulsions, and coma, frequently fatal. Glycine has been suggested for the management of hypoglycin A toxicity.

Hypophosphorous Acid

Acidum Hypophosphorosum; Hypofosforoso, ácido; Phosphinic Acid.

$\text{H}_3\text{PO}_2 = 66.0$.

CAS — 6303-21-5; 14332-09-3.

Pharmacopoeias. In USNF.

USNF 26 (Hypophosphorous Acid). It contains 30 to 32% of H_3PO_2 . A colourless or slightly yellow, odourless liquid. Store in airtight containers.

Profile

Hypophosphorous acid is used as an antioxidant. Hypophosphates were used in tonics; like the glycerophosphates they are not a suitable source of phosphorus.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **UK:** Dispello.

Hyssop

Herba Hyssopi; Hysope; Hyssop Wort; Ysop.

Pharmacopoeias. In Fr.

Profile

Hyssop is the fresh or dried aerial parts of *Hyssopus officinalis* (Lamiaceae). The herb and its preparations are included in herbal preparations mainly for disorders of the gastrointestinal and upper respiratory tracts.

It is the source of hyssop oil which is used in aromatherapy.