

Profile

Caraway is an aromatic carminative, and is used in gastrointestinal disorders and as a flavour. The seeds have culinary uses. It is the source of caraway oil (below).

Preparations

USNF 26: Compound Cardamom Tincture.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austria:** Mag Kottas Kräuterexpress Abführtee; Midro Tee; Montana; Nesthaken; Species Carvi comp†; **Braz:** Balsamo Branco; **Cz:** Blahungstee N†; Iberogast; **Ger:** Carminativum Hofmann; Carminativum-Hetterich; Carminativum-Pascoe†; Cholosom-Tee; Floradix Multipretten N; Gastrol St†; Gastrosecur†; Iberogast; Lomatol†; Majocarmin-Tee; Montana N; Pascoventral; Presselin Blahungs K 4 N†; Presselin Dyspeptikum†; Stovalid N†; **Israel:** Jungborn; Lido Tea; Midro-Tea; **Ital:** Anice (Specie Composita)†; Cadifen; Cadimint; Camomilla (Specie Composita)†; Florelax; Midro; Relaxcol; Tarassaco (Specie Composita)†; **Pol:** Apinorm; Laxantol; Melis-Tonic; Rhelax; Tabletki Przeciw Niestrawności; Tablettae Laxantes; **Rus:** Anisic Herion Drops for the Gallbladder (Гербіон Каліи Желудочные); Herbio Drops for the Stomach (Гербіон Желудочные Каліи); **S.Afr:** Clairor; **Spain:** Natusor Aerofane†; **Switz:** Kernosan Heideberger Poudre; Phytomed Gastro†; Tisane favorisant l'allaitement.

Caraway Oil

Alcaravea, aceite esencial de; Carvi aetheroleum; Carvi Etheroleum; Carvi, huile essentielle de; Křmínová silice; Kuminaöljy; Kümmelöl; Kumminolja; Olejek kminkowy; Oleum Cari; Oleum Carui; Oleum Carvi.

Pharmacopoeias. In *Eur.* (see p.vii). Also in *USNF*.

Ph. Eur. 6.2 (Caraway Oil). The oil obtained by steam distillation from the dry fruits of *Carum carvi*. A clear, colourless or yellow liquid. Relative density 0.904 to 0.920. Store in well-filled, airtight containers at a temperature not exceeding 25°. Protect from light.

USNF 26 (Caraway Oil). The volatile oil distilled from caraway. It contains not more than 50% v/v of carvone (C₁₀H₁₄O). Soluble 1 in 8 of alcohol (80%). Store in airtight containers. Protect from light.

Profile

Caraway oil is an aromatic carminative and is used in gastrointestinal disorders and as a flavour. It is also employed as caraway water for infant colic (see Gastrointestinal Spasm, p.1696).

Preparations

BP 2008: Aromatic Cardamom Tincture; Compound Cardamom Tincture.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austria:** Nesthaken; Parodontax; Sabatiff; Sigman-Haustropfen; Spasmo Claim; **Cz:** Contraspán; Naturident†; **Ger:** Áspasmon N†; Enteroplant; Eufiat I†; Floradix Multipretten N; Galloselect M†; Gastricard†; Gastrysat; Lomatol†; Majocarmin forte†; Neo-Ballistol†; Pascopankreat novor†; ratioGast†; **Hung:** Enteroplant; **India:** Bestozyme; Catazyme-P; Neopeptine; Vitazyme; **Ital:** Relaxcol; **Mex:** Enterokan; **Singapore:** Enterokan†; **Switz:** Flatulex; Huile Po-Ho A. Vogel; Parodontax†; **Thai:** Gas-Nep; Gripe Mixture; **UK:** Atkinson & Barker's Gripe Mixture; Nurse Harvey's Gripe Mixture.

Carbon-13

Carbono 13.

CAS — 14762-74-4.

Profile

Carbon-13 is a naturally occurring, non-radioactive, stable isotope of carbon. It has been used to label organic compounds, such as urea (p.1620), for use in diagnostic tests, including breath tests for the diagnosis of *Helicobacter pylori* infection.

Preparations

USP 31: Urea C 13 for Oral Solution.

Proprietary Preparations (details are given in Part 3)

Cz: Pylobactel; **Denm:** Diabact; Helicobacter Test; **Fr:** Heli-Kit; **Gr:** Helicobacter; Pylobactel; **Ital:** Breathquality-UBT; Citredici UBT Kit; Expirobacter; Helicokit; Pylobactell†; **Mex:** Alitest†; **Neth:** Helico State; Pylobactell-13C; UBTtest; **Port:** Helico-teste; Helicobacter Test; Ubit; **Spain:** Pylori Check†; Tau Kit; Ubttest; **Swed:** Diabact UBT; Helicobacter Test; **Switz:** Helicobacter Test; Pylori 13†; **UK:** Diabact UBT; Pylobactell; **USA:** Meretek UBT.

Multi-ingredient: **USA:** Ez-HBT.

Cardamom

Cardamomi; Cardamomo, fruto del.

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

BP 2008 (Cardamom Fruit). The dried, nearly ripe fruit of *Elettaria cardamomum* var. *minuscule*. Only the seeds are used in making preparations of cardamom and they are used immediately after removal from the fruit. The seeds should not be stored after removal from the fruit. They have a strongly aromatic odour and taste and contain not less than 4% v/v of volatile oil.

USNF 26 (Cardamom Seed). The dried ripe seed of *Elettaria cardamomum* (Zingiberaceae), recently removed from the capsule. Preserve against attack by insects.

Profile

Preparations of cardamom are used as carminatives and as flavours. The seeds have culinary uses. Cardamom seeds are the source of cardamom oil (below).

The symbol † denotes a preparation no longer actively marketed

Preparations

USNF 26: Compound Cardamom Tincture.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austral:** Peritone; Travelaide†; **Austria:** Mariazeller; **Cz:** Dr Theiss Rheuma Creme†; Dr Theiss Schwedenbitter; Klosterfrau Melisana; **Ger:** Gallexier; Montana N; Presselin Dyspeptikum†; Schweden-trunk Elixier; **India:** Carmicide; **Pol:** Melisana Klosterfrau; **Rus:** Suprima-Broncho (Суприма-Бронхо); **S.Afr:** Alma; Enterodyne; Helmontskruie; **Spain:** Digestovital†; **Switz:** Stomacine; **Thai:** Carmicide†; **UK:** Indian Brandy; Pegina.

Cardamom Oil

Cardamomo, aceite esencial de; Ol. Cardamom.

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

BP 2008 (Cardamom Oil). A clear, colourless or pale yellow liquid, visibly free from water, with an odour of cardamom fruit. It is distilled from crushed cardamom fruit. At 20° it is soluble 1 in 6 of alcohol (70%). Store at a temperature not exceeding 25° in well-filled containers. Protect from light.

USNF 26 (Cardamom Oil). The volatile oil obtained from cardamom seed. Soluble 1 in 5 of alcohol (70%). Store in airtight containers. Protect from light.

Profile

Preparations of cardamom oil are used as carminatives and as flavours.

Preparations

BP 2008: Aromatic Cardamom Tincture; Compound Cardamom Tincture; Compound Rhubarb Tincture.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **India:** Catazyme-P; Digeplex; Vitazyme; **Thai:** Gas-Nep.

Carglumic Acid (*HINN*)

Acide Carglumique; Ácido carglúmico; Acidum Carglumicum; Carglutamic Acid; Karglumik Asit. N-Carbamoyl-L-glutamic acid.

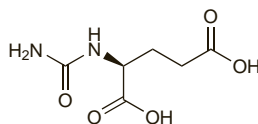
Карглумовая Кислота

C₆H₁₀N₂O₅ = 190.2.

CAS — 1188-38-1.

ATC — A16AA05.

ATC Vet — QA16AA05.



Profile

Carglumic acid is used for the treatment of hyperammonaemia in patients with N-acetylglutamate synthase deficiency. The initial daily dose ranges from 100 to 250 mg/kg, adjusted thereafter to maintain normal plasma levels of ammonia. Individual responsiveness to carglumic acid should be tested before starting long-term therapy; daily maintenance doses range from 10 to 100 mg/kg. The total daily dose should preferably be taken as 2 to 4 divided doses before food.

◇ References to the use of carglumic acid in the management of hyperammonaemia due to N-acetylglutamate synthase deficiency.

- Béanger-Quintana A, *et al.* Hyperammonaemia as a cause of psychosis in an adolescent. *Eur J Pediatr* 2003; **162**: 773–5.
- Caldovic L, *et al.* Restoration of ureagenesis in N-acetylglutamate synthase deficiency by N-carbamylglutamate. *J Pediatr* 2004; **145**: 552–4.
- Gebhardt B, *et al.* N-carbamylglutamate protects patients with decompensated propionic aciduria from hyperammonaemia. *J Inher Metab Dis* 2005; **28**: 241–4.
- Guffon N, *et al.* Neonatal hyperammonemia: the N-carbamoyl-L-glutamic acid test. *J Pediatr* 2005; **147**: 260–2.
- Jones S, *et al.* N-Carbamylglutamate for neonatal hyperammonaemia in propionic acidemia. *J Inher Metab Dis* 2008. Available at: doi: 10.1007/s10545-008-0777-1

Preparations

Proprietary Preparations (details are given in Part 3)

Belg: Carbaglu; **Cz:** Carbaglu; **Denm:** Carbaglu; **Fr:** Carbaglu; **Ger:** Carbaglu; **Ital:** Carbaglu; **Neth:** Carbaglu; **Pol:** Carbaglu; **Port:** Carbaglu; **Spain:** Carbaglu; **UK:** Carbaglu.

Carnauba Wax

Brazil Wax; Caranda Wax; Carnauba, cire de; Cera carnauba; Cera Coperniciae; Cera de carnauba; E903; Karnauba palmavasz; Karnaubavaha; Karnaubavax; Karnauba vaškas; Vosk karnaubský.

CAS — 8015-86-9.

Pharmacopoeias. In *Eur.* (see p.vii), *Int.*, and *Jpn.* Also in *US-NF*.

Ph. Eur. 6.2 (Carnauba Wax). It is obtained from the leaves of

Copernicia cerifera. Pale yellow or yellow powder, flakes, or hard masses. It has a relative density of about 0.97. M.p. 80° to 88°. Practically insoluble in water and in alcohol; soluble on heating in ethyl acetate and in xylene. Protect from light.

USNF 26 (Carnauba Wax). It is obtained from the leaves of *Copernicia cerifera* (Palmae). A light brown to pale yellow, moderately coarse powder or flakes, possessing a characteristic bland odour, and free from rancidity. Sp. gr. about 0.99. M.p. 80° to 86°. Insoluble in water; slightly soluble in boiling alcohol; soluble in warm chloroform and in warm toluene; freely soluble in warm benzene.

Profile

Carnauba wax is used in pharmacy as a coating agent. Its use is also permitted in certain foods. Various types and grades are used industrially in the manufacture of polishes.

Caroverine (*pINN*)

Caroverina; Caroverine; Caroverinum. 1-[2-(Diethylamino)ethyl]-3-(p-methoxybenzyl)-2(1H)-quinoxalinone.

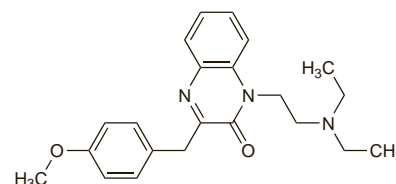
Кароверин

C₂₂H₂₇N₃O₃ = 365.5.

CAS — 23465-76-1.

ATC — A03AX11.

ATC Vet — QA03AX11.



Profile

Caroverine is a smooth muscle relaxant with calcium-channel blocking and glutamate-antagonist properties. It is used as the base or the hydrochloride in conditions associated with painful smooth muscle spasm. Typical doses (expressed as the base) are 20 to 40 mg by mouth three or four times daily. It may also be given by slow intravenous or intramuscular injection in doses of 40 to 80 mg. Caroverine has also been given rectally. It is also used in cerebral circulatory disorders and in tinnitus.

◇ References.

- Denk DM, *et al.* Caroverine in tinnitus treatment: a placebo-controlled blind study. *Acta Otolaryngol* 1997; **117**: 825–30.
- Ehrenberger K. Clinical experience with caroverine in inner ear diseases. *Adv Otorhinolaryngol* 2002; **59**: 156–62.
- Quint C, *et al.* The quinoxaline derivative caroverine in the treatment of sensorineural smell disorders: a proof-of-concept study. *Acta Otolaryngol* 2002; **122**: 877–81.

Preparations

Proprietary Preparations (details are given in Part 3)

Austria: Delirex; Spasmium; Tinnitín; **Switz:** Calmaverine†.

Multi-ingredient: **Austria:** Spagall; Spasmium comp.

Cartilage and Cartilage Extracts

Profile

Preparations containing cartilage or cartilage extracts from various sources have been used in musculoskeletal and joint disorders and as nutritional supplements. A product derived from shark cartilage (AE-941, p.677) is under investigation as an anti-neoplastic.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg: Carti-buron; Cartilade†; Cartilago Vital; Cartimax; **Austral:** Cartilag; **Indon:** Fellaift; Sharko Inside.

Multi-ingredient: **Arg:** Arrumalon†; Carti buron flex; Cartiflex; Collagen T2-Gag†; CT 1000; Rep-Cartil; **Braz:** Rumalon†; **Chile:** Cartilago Compuesto†; Cartilago T-500; Rumalon; **Fr:** Oligo-Yang†; **Hong Kong:** Cervusen; **Hung:** Rumalon†.

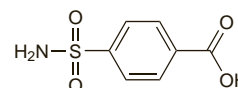
Carzenide (*HINN*)

Carcenida; Carzenida; Carzéniide; Carzenidum. p-Sulphamoylbenzoic acid.

Карзенид

C₇H₇NO₄S = 201.2.

CAS — 138-41-0.



Profile

Carzenide is an antispasmodic that has been used in the treatment of dysmenorrhoea.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Arg.:** Saldeva†.

Oriental Cashew

Anacardier d'orient; Anacardium; Cashew-pähkinä; Indisk nöt; Marking Nut Tree; Markingnut Tree; Nanercz wschodni; Semecarpus anacardium.

Pharmacopoeias. *Eur.* (see p.vii) includes a form for homoeopathic preparations.

Ph. Eur. 6.2 (Oriental Cashew for Homoeopathic Preparations; Semecarpus Anacardium ad Praeparationes Homoeopathicas). The dried fruit of *Semecarpus anacardium* (*Anacardium orientale*). It contains a minimum 6.0% of total phenol derivatives expressed as eugenol.

Profile

Various parts of the oriental cashew, *Semecarpus anacardium* (Anacardiaceae), and their preparations are used in traditional Indian medicine. The oil contains bhilawanols, irritant substances reputed to have cytotoxic action.

Homoeopathy. The dried ripe fruit of oriental cashew is used in homoeopathic medicines under the following names: Anacardium; Semecarpus anacardium; Anacardium orientale; Anac. or.

Cassia Oil

Canela de la China, aceite de; Cannelier; huile essentielle de; Chinese Cinnamon Oil; Cinnamomi cassiae aetheroleum; Cinnamomi Cassiae Etheroleum; Kassiakaneliöljy; Kassiaoilja; Kínai fahéjölaj; Kíniniű cinamonű eterinis aliejus; Oleum Cassiae; Oleum Cinnamomi; Oleum Cinnamomi Cassiae; Silice skořicovníku čín-ského.

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

Chin. and *Jpn* also include cassia bark which may be known as cinnamon bark. In some countries cassia oil is known as cinnamon oil (p.2283).

Ph. Eur. 6.2 (Cassia Oil). The oil obtained by steam distillation of the leaves and young branches of *Cinnamomum cassia* (*C. aromaticum*). It contains 70 to 90% of cinnamaldehyde. A clear, mobile, yellow to reddish-brown liquid, with a characteristic odour of cinnamaldehyde. Store in well-filled airtight containers. Protect from light and heat.

Profile

Cassia oil has properties resembling those of cinnamon oil (p.2283) and is used similarly as a carminative and flavour. It has also been used in aromatherapy. Hypersensitivity to cinnamaldehyde, the main constituent of cassia oil, has been reported.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austral.:** Tiger Balm Red; **S.Afr.:** Balsam Vita GEEL; Balsam Vita ROOI; Balsam Vita WIT; Moultons Pain Paint; Stuidruppels; **UK:** Dragon Balm.

Castor Oil

Aceite de Ricino; Hintyağ; Huile de Ricin; Ol. Ricin.; Oleum Ricini; Ricini Oleum; Ricini Oleum Virginal; Ricino, aceite de; Ricinolja (jungfruolja); Ricinový olej panenský; Ricinusolaj; Risiiniöljy; neitsöljy; Rizinusöl.

ATC — A06AB05.

ATC Vet — QA06AB05.

NOTE. CASOIL is a code approved by the BP 2008 for use on single unit doses of eye drops containing castor oil where the individual container may be too small to bear all the appropriate labelling information.

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

Eur. also includes hydrogenated castor oil and refined castor oil. *USNF* includes hydrogenated castor oil.

Ph. Eur. 6.2 (Castor Oil, Virgin). The fatty oil obtained by cold expression from the seeds of *Ricinus communis*. Relative density about 0.958. It is a clear, almost colourless or slightly yellow, viscous, hygroscopic liquid. Miscible with alcohol and with glacial acetic acid; slightly soluble in petroleum spirit. Store in well-filled airtight containers. Protect from light.

Ph. Eur. 6.2 (Castor Oil, Hydrogenated; Ricini Oleum Hydrogenatum). The oil obtained by hydrogenation of castor oil. It consists mainly of the triglyceride of 12-hydroxystearic acid. Almost white to pale yellow fine powder, masses, or flakes. M.p. 83° to 88°. Practically insoluble in water and in petroleum spirit; very slightly soluble in dehydrated alcohol; slightly soluble in dichloromethane. Store in well-filled containers.

Ph. Eur. 6.2 (Castor Oil, Refined). The fatty oil obtained by cold expression from the seeds of *Ricinus communis* and then refined.

A suitable antioxidant may be added. Relative density about 0.958. It is a clear, almost colourless or slightly yellow, viscous, hygroscopic liquid. Miscible with alcohol and with glacial acetic acid; slightly soluble in petroleum spirit. Store in well-filled, airtight containers. Protect from light.

USP 31 (Castor Oil). The fixed oil obtained from the seed of *Ricinus communis* (Euphorbiaceae). It is a pale yellowish or almost colourless, transparent, viscid liquid. Has a faint, mild odour; is free from foreign and rancid odour; and has a bland, characteristic taste. Soluble in alcohol; miscible with dehydrated alcohol, with chloroform, with ether, and with glacial acetic acid. Store in airtight containers at a temperature not exceeding 40°.

USNF 26 (Hydrogenated Castor Oil). Refined, bleached, hydrogenated, and deodorised castor oil, consisting mainly of the triglyceride of hydroxystearic acid. A white, crystalline wax. M.p. 85° to 88°. Insoluble in water and in most common organic solvents. Store in airtight containers at a temperature not exceeding 40°.

Adverse Effects and Precautions

Oral administration of castor oil, particularly in large doses, may produce nausea, vomiting, colic, and severe purgation. Castor oil should not be given when intestinal obstruction is present.

The seeds of *Ricinus communis* contain a toxic protein, ricin (p.2379). Allergic reactions have been reported in subjects handling the seeds.

Uses and Administration

Castor oil is used externally for its emollient effect. It has also been used topically to allay irritation due to foreign bodies in the eye. Castor oil may be employed as the solvent in some injections.

Hydrogenated castor oil is used as a stiffening agent. Polyoxyl castor oils (p.1918) are used as emulsifying and solubilising agents.

Castor oil has been used as a laxative, but such use is obsolete.

Preparations

BP 2008: Chloroxyleneol Solution; Flexible Collodion; Zinc and Castor Oil Ointment;

USP 31: Aromatic Castor Oil; Castor Oil Capsules; Castor Oil Emulsion; Flexible Collodion.

Proprietary Preparations (details are given in Part 3)

Arg.: Capsulas Handet†; **Braz.:** Laxol; **Canad.:** Neoloid†; **Ger.:** Laxopol; **Gr.:** Kikelaio EF 3†; **Israel:** Laxopol; **Mex.:** Ricitel; **Switz.:** Herbapharm Ricalf†; **Rical. Turk.:** Ricliaks; Ricipan; **USA:** Emulsoil; Neoloid; Purge†.

Multi-ingredient: **Arg.:** Calculina†; **Austral.:** Seda-Rash†; **Chile:** Node DS; **Cz.:** Suspensio Visnevski cum Pice Liquida Herbacos; **Mex.:** Nutegen G†; **Pol.:** Saliolol; **Spain:** Otocerum; **Switz.:** Peru Stick; **USA:** Allanderm-T; Dermuspray; Dr Dermi-Heal; Granulderm; Granulex; GranuMed; Mammol; Proderm; Xenaderm.

Catalase

Caperase; Catalasa; Equilase; Optidase.

Profile

Catalase is an enzyme obtained from a wide variety of biological sources including animal liver (hepatocatalase) and certain bacteria and fungi. It is a protein composed of 4 polypeptide subunits, the precise composition of which varies according to the source, and has a molecular weight of about 240 000. Catalase has the ability to promote the decomposition of hydrogen peroxide to water and oxygen.

It has been applied to wounds and skin ulcers and has also been used in the treatment of eczema. It has sometimes been used with glucose oxidase (p.2313) in food preservation to break down hydrogen peroxide produced during oxidation of glucose, and is also included in preparations for contact lens care to neutralise hydrogen peroxide.

Catalase is a free-radical scavenger and has been investigated for its ability to limit reperfusion injury thought to be related to free-radical production. Combinations of catalase with superoxide dismutase have also been investigated.

◇ References.

1. Greenwald RA. Superoxide dismutase and catalase as therapeutic agents for human diseases: a critical review. *Free Radic Biol Med* 1990; 8: 201–9.

Preparations

Proprietary Preparations (details are given in Part 3)

Ital.: Citrizan; **Spain:** Biocatalase†.

Multi-ingredient: **Arg.:** One Step†; Oxysept Comfort; Vitix; **Canad.:** UltraCare; **Fr.:** Pulvo 47 Neomycine†; Pulvo 47†; **Ger.:** Pulvo; Pulvo Neomycin; **Gr.:** Pulvo 47; **Ital.:** Citrizan Antibiotic†; **NZ:** Omnicare 1 Step†; **Thai.:** Pulvo 47; **Turk.:** Pulvo 47; **USA:** UltraCare.

Catechu

Gambier; Gambir; Pale Catechu.

CAS — 8001-48-7.

NOTE. Distinguish from Black Catechu (p.2267).

Pharmacopoeias. In *Jpn*. Also in *BP(Vet)*.

Chin. and *Jpn* include Ramulus Uncariae cum Uncis, the thorn from various species of *Uncaria*.

BP(Vet) 2008 (Catechu). A dried aqueous extract of the leaves

and young shoots of *Uncaria gambier* occurring as dull pale greyish-brown to dark reddish-brown cubes. Odourless or almost odourless.

Profile

Catechu is an astringent and has been given in preparations for the treatment of diarrhoea and other gastrointestinal disorders.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austral.:** Chemists Own Diarrhoea Mixture†; Di-arcalm; **Fr.:** Elixir Bonjean; **Indon.:** Entrodian; **Ital.:** Flavion; **S.Afr.:** Entero-dyne; SB Diarrhoea Mixture; Tandpyndruppels; **UK:** Chesty Cough Relief; Spanish Tummy Mixture.

CD4 Antibodies

Anti-CD4 Monoclonal Antibodies; Anticuerpos CD4; CD4mAb; Monoclonal CD4 Antibodies.

Антитела Против CD4-Клеток

Profile

Monoclonal antibodies raised against CD4 receptors are under investigation in the treatment of immunologically mediated disorders, such as rheumatoid arthritis, multiple sclerosis, inflammatory bowel disease, asthma, cutaneous T-cell lymphoma, psoriasis, and various other skin disorders, with the aim of decreasing and eliminating circulating helper T lymphocytes. They have also been tried in transplantation. CD4 antibodies investigated include: clenoliximab, keliximab, priliximab, and zanolimumab.

Red Cedar

Eastern Red Cedar.

NOTE. Distinguish cedar wood oil, obtained from species of *Juniperus virginiana*, and cedar leaf oil, obtained from *Thuja occidentalis* (see Thuja, p.2400).

Profile

Red cedar, *Juniperus virginiana* (Cupressaceae), is the source of cedarwood oil (cedar wood oil; red cedar oil). The oil is used in perfumery and is included in preparations for nasal congestion and various skin disorders. It is also used in aromatherapy. Atlantic cedarwood oil (Atlas cedarwood oil) from *Cedrus atlantica* (Pinaceae) and oils from the wood of other species of *Juniperus* and *Cedrus* are used similarly.

Cedarwood oil should be distinguished from cedar leaf oil, obtained from *Thuja occidentalis* (see Thuja, p.2400).

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austria:** Emser Nasensalbe; Wick Vaporub; **Fr.:** Vege-bom; **Ger.:** Emser Nasensalbe N†; **NZ:** Vicks Vaporub; **Port.:** Betacade†; **Swed.:** Vicks Vaporub†; **UK:** No-Sor Vapour Rub.

Celery

Apio; Apium; Celery Fruit; Celery Seed.

CAS — 8015-90-5 (celery oil).

Profile

Celery consists of the dried ripe fruits of *Apium graveolens* (Umbelliferae). Other parts of the plant are also used. Celery is reported to have diuretic properties and has been included in herbal preparations for rheumatic disorders. Celery oil has also been used similarly. Allergic and photoallergic reactions have been reported.

Celery also has culinary uses. Celery seed oil is used in aromatherapy.

Homoeopathy. Celery has been used in homoeopathic medicines under the following names: Apium graveolens; Apium. gr.

◇ References.

1. Houghton P. Bearberry, dandelion and celery. *Pharm J* 1995; 255: 272–3.

Insect repellent. A hexane extraction of celery seed has shown promise as a mosquito repellent.¹

1. Tueton B, et al. Repellent properties of celery, *Apium graveolens* L., compared with commercial repellents, against mosquitoes under laboratory and field conditions. *Trop Med Int Health* 2005; 10: 1190–8.

Interactions. For a report of severe phototoxicity occurring in a patient who had consumed celery soup before undergoing PUVA therapy, see Interactions under Methoxsalen, p.1606.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Arg.:** Calmtabs†; **Austral.:** Arthriforte; Arthritic Pain Herbal Formula 1; Biogan Arthri Plus; Boswellia Complex; Devils Claw Plus; Fluid Loss†; Guaiacum Complex†; Lifesystem Herbal Formula 1 Arthritic Aid†; **Canad.:** Herbal Diuretic; **India:** Flexi-muv; **Malaysia:** Celery Plus†; **Philipp.:** Reflex; **UK:** Mixed Vegetable Tablets; Modern Herbs Rheumatic Pain; Rheumatic Pain; Rheumatic Pain Relief; Vegetex.