

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; Semicarpus anacardium.

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

Ph. Eur. 6.2 (Oriental Cashew for Homoeopathic Preparations; Semicarpus Anacardium ad Praeparationes Homoeopaticas). 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 bhillawanols, 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; Semicarpus 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; Kassiakaneliölly; Kassiaolja; Kínai fahéjola; Kíniyi cinamonų eterinis aliejus; Oleum Cassiae; Oleum Cinnamomi; Oleum Cinnamomi Cassiae; Siliče 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 ROQI; Balsam Vita WIT; Moultons Pain Paint; Stuidruppels; UK: Dragon Balm.

Castor Oil

Acete de Ricino; Hintyağ; Huile de Ricin; Ol. Ricin.; Oleum Ricini; Ricini Oleum; Ricini Oleum Virginalis; Ricino, aceite de; Ricinolja (jungfruolja); Ricinový olej panenský; Ricinusolaj; Risiiniölly, neitsytölly; 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, viscous 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: Chloroxylenol 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 Hande†; **Braz.:** Laxol; **Canad.:** Neoloid†; **Ger.:** Laxopol; **Gr.:** Kikelaio EF 3†; **Israel:** Laxopol; **Mex.:** Ricitel; **Switz.:** Herbapharm Ricaj†; **Ricaj. Turk.:** Ricilaks; **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.:** Saliyol†; **Spain:** Otocerum; **Switz.:** Peru Stick; **USA:** Allandermt; 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.

- 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 Antibiotico; **NZ:** Onnicare I 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†; Diarracalm; **Fr.:** Elixir Bonjean; **Indon.:** Entrodian; **Ital.:** Flavion; **S.Afr.:** Enterodyne; **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.:** Vegebom; **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.

- 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

- Tuettin 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 I; Biogan Arthri Plus; Boswellia Complex; Devils Claw Plus; Fluid Loss†; Guaiacum Complex†; Lifesystem Herbal Formula I 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.