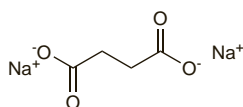


**Sodium Succinate**

E363 (succinic acid); Succinato de sodio.

 $C_4H_4Na_2O_4 \cdot 6H_2O = 270.1$ .

CAS — 150-90-3 (anhydrous sodium succinate); 6106-21-4 (sodium succinate hexahydrate).

**Profile**

Sodium succinate is an ingredient of topical preparations tried for the treatment of cataract. It is also used as a food additive.

**Preparations****Proprietary Preparations** (details are given in Part 3)**Multi-ingredient:** **Fr.:** Cristopal†; **Spain:** Vitaphakol.**Solidago**

Aranyvesszűfű (solidaginis herba); Echtes Goldrutenkraut (*S. virgaurea*); European Goldenrod (*S. virgaurea*); Golden Rod; Goldrutenkraut (*S. gigantea* or *S. canadensis*); Gullris, europeisk (solidaginis virgaureae herba); Gullris (solidaginis herba); Herba Virgaureae (*S. virgaurea*); Kultapiisku, eurooppalainen (solidaginis virgaureae herba); Kultapiisku (solidaginis herba); Nat' zlatobýlu obecného (solidaginis virgaureae herba); Paprastujú rykštenių žolė (solidaginis virgaureae herba); Rykštenių žolė (solidaginis herba); Solidage; Solidage verge d'or (*S. virgaurea*); Solidaginis Herba (*S. gigantea* or *S. canadensis*); Solidaginis virgaureae herba (*S. virgaurea*); Solidago Virga Aurea (*S. virgaurea*); Verge d'or; Ziele nawłoci (*S. virgaurea*); Ziele nawłoci pospolitej (*S. virgaurea*); Zlatobýlová nat' (solidaginis herba).

NOTE. The name Aaron's Rod has been applied to a number of plants including *Solidago* spp., *Verbascum* spp., and *Sempervivum tectorum*.

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

**Ph. Eur. 6.2** (Goldenrod, European; Solidaginis virgaureae herba). The whole or cut dried, flowering aerial parts of *Solidago virgaurea*. It contains not less than 0.5% and not more than 1.5% flavonoids, expressed as hyperoside ( $C_{21}H_{20}O_{12} = 464.4$ ) with reference to the dried drug.

**Ph. Eur. 6.2** (Goldenrod; Solidaginis herba). The whole or cut dried, flowering aerial parts of *Solidago gigantea* or *S. canadensis*. It contains not less than 2.5% of flavonoids, expressed as hyperoside ( $C_{21}H_{20}O_{12} = 464.4$ ) with reference to the dried drug.

**Profile**

*Solidago virgaurea* (Asteraceae) has diuretic and anti-inflammatory activity. It is mainly used in inflammatory disorders of the bladder and kidneys and for the treatment of renal stones. It is also included in herbal preparations used for a variety of disorders.

*S. gigantea* (Early golden-rod) and *S. canadensis* were once considered to be adulterants of *S. virgaurea* but are now recognised as having similar activity.

**Homeopathy.** *Solidago* has been used in homeopathic medicines under the following names: *Solidago virgaurea*; Sol. vir.

**Preparations****Proprietary Preparations** (details are given in Part 3)

**Cz.:** Zlatobýlová Nat; **Ger.:** Calceful Aqua†; Canephron S; Cystinol Long; Cystium Solidago; Cysto Fink Mono†; Granu Fink Durchspulung†; Kalkurenal Goldrute; Nephrosol mono; Nephrolith mono†; Nieral; Solidagoren mono; Stromic; Urol; Uroplant†.

**Multi-ingredient:** **Austral.:** Bioglan Cranbiotic Super; Euphrasia Complex; Euphrasia Compound; Extralife Fluid-Care; Phytodolor; **Austria:** Heumann's Blasen- und Nierentee; Phytodolor; Solubitrat; Urelum Neu; **Cz.:** Antirevmatický Caj; Epilobin; Phytodolor; Stofwedseltee N†; Urcyston Planta; **Fr.:** Solution Stago Diluée; **Ger.:** Aqualibra; BioCyst; Canephron novo†; Cefasabal; Cystinol N; Dr. Scheffler Bergischer Krautertee Blasen- und Nierentee; Harntee 400 N; Harntee STADA; Harntee-Steiner; Heumann Blasen- und Nierentee Solubitrat S†; Heumann Blasen- und Nierentee Solubitrat uro; Heweberberol-Tee; Hewenephron duo†; Incontinin†; nephro-loges; Nephro-Pasc†; Nephronorm med†; Nephropur tri†; Nephroselect M; Nephrobin-N†; Nieron Blasen- und Nieren-Tee VF†; Nieron S†; Nieroxin N†; Phytodolor; Presselin Nieren-Blasen K 3†; Prostamed; Renob Blasen- und Nierentee; Rhoival†; Solidagoren N; Urodid phyto†; **Ital.:** Flavion; Gramigna (Specie Composta)†; **Pol.:** Diuronis; Fitoven; Nefrobonisol; Nefrol; Nefroscept; NeoFitolizina; Prostopol; Reumacor; Urofort; Uromix; Uroprost; **Port.:** Prostamed†; **Rus.:** Prostanorm (Простанорм); **Spain:** Natusor Artlane†; Natusor Renal†; Renusor†; **Switz.:** Demonator Dragees pour les reins et la vessie; Dragees S pour les reins et la vessie; Gem; Nephrosolid; Phytomed Nephro†; Phytomed Prosta†; Urinex.

**Sorrel**

Acedera Común; Azeda-Brava; Garden Sorrel; Herba Rumicis Acetosae; Oseille; Sorrel Dock; Sour Dock; Vinagrera; Wiesensauerampfer.

NOTE. The name sour dock has also been used for yellow dock (p.2416).

The symbol † denotes a preparation no longer actively marketed

**Profile**

Sorrel (*Rumex acetosa*, Polygonaceae) has been used for respiratory-tract disorders. It is also used as a culinary herb.

**Preparations****Proprietary Preparations** (details are given in Part 3)

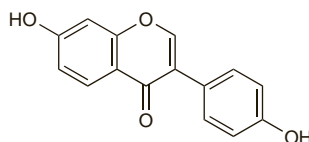
**Multi-ingredient:** **Austria:** Sinupret; Solvopret; **Cz.:** Sinupret; **Ger.:** Sinupret; **Hong Kong:** Sinupret; **Hung.:** Sinupret; **Indon.:** Sinupret; **Mex.:** Bisolsinus; **Philipp.:** Sinupret; **Pol.:** Sinupret; **Rus.:** Sinupret (Синупрет); **Singapore:** Sinupret; **Switz.:** Sinupret; **Thai.:** Sinupret.

**Soya Isoflavones****Daidzein**

4',7-Dihydroxyisoflavone; 7-Hydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one.

 $C_{15}H_{10}O_4 = 254.2$ .

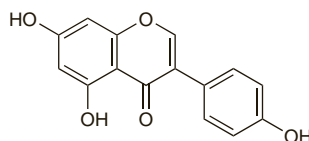
CAS — 486-66-8.

**Genistein**

CI-75610; Genisteol; Prunetol. 4',5',7-Trihydroxyisoflavone; 5,7-Dihydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one.

 $C_{15}H_{10}O_5 = 270.2$ .

CAS — 446-72-0.

**Profile**

Genistein and daidzein are soya isoflavones. Genistein, a tyrosine kinase inhibitor, is a phytoestrogen that has been tried for the relief of menopausal symptoms. It is also being investigated for its beneficial effect on blood lipids and for its proposed tumour-suppressing activity. Daidzein has been investigated similarly. Daidzein, mainly in the form of its glycoside daidzin, is a component of some herbal medicines traditionally used in the management of alcohol abuse.

**Effects on the endocrine system.** For a suggestion that isoflavones in soya-based formulas may exert biological effects, see p.1966.

**Hyperlipidaemias.** For a discussion of possible beneficial effects of soya isoflavones on blood lipids, see p.1967.

**Menopausal disorders.** Soya isoflavones have been investigated for their oestrogen-modulating effects, see p.1967.

**Preparations****Proprietary Preparations** (details are given in Part 3)

**Arg.:** Sojadol; Sojar Men; Tamivil Isoflavonas; **Braz.:** Buona; Flavonil; Isoflavine; Menop; Soy 50; Soyfemme; **Fr.:** Flavonex; Inoclim; **Hong Kong:** Phyto Soya; Phyto-Care; **Indon.:** Calvonic; Promensil; **Ital.:** Soygen Gel; **Mex.:** Pausicaps†; **Port.:** Isogyn†; **S.Afr.:** Phytopause; **Singapore:** Isovon; **Venez.:** Climasoy.

**Multi-ingredient:** **Arg.:** Isaflovan; Sigmafen Free; Snella; Sojar Plus-Calcio; Sojasterol†; **Canad.:** Natural HRT; **Fr.:** Anacaps; Effia; Estrofort; Gynalpha Plus; **Hong Kong:** Caltrate + Soy; Palmetto Plus†; Phyto-Ease; Phytoestrin†; **Indon.:** Cal-95; Calosbon; Femosa; Hi-Bone; Isofem; Apoego; Cimil Gel; Evestrel; Fitogenase; Rinnova; **Port.:** Afron†; Femnet†; **S.Afr.:** Phytopause BSF; **Singapore:** Caltrate + Soy; Palmetto Plus; Phytoestrin; **UK:** Aria; SoyPlus; **USA:** Better Cholesterol; Fosteum; **Venez.:** Calcibon D Soya.

**Sparteine Sulfate** (*USAN, rINNM*)

Spart. Sulph.; Spartéine, Sulfate de; Sparteine Sulphate; (–)-Sparteine Sulphate; l-Sparteine Sulphate; Sparteini Sulfas; Sparteinum Sulfuricum; Sulfato de esparteina. Dodecahydro-7,14-methano-2H,6H-dipyrido[1,2-a:1',2'-e][1,5]diazocine sulphate pentahydrate.

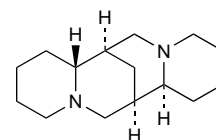
Спартеина Сульфат

 $C_{15}H_{26}N_2 \cdot H_2SO_4 \cdot 5H_2O = 422.5$ .

CAS — 90-39-1 (sparteine); 299-39-8 (anhydrous sparteine sulfate); 6160-12-9 (sparteine sulfate pentahydrate).

ATC — C01BA04.

ATC Vet — QC01BA04.



(sparteine)

**Pharmacopoeias.** In *Fr.* and *Viet.***Profile**

Sparteine sulfate is a salt of the dibasic alkaloid, sparteine, which is obtained from scopolium (p.2384). Sparteine sulfate has been reported to lessen the irritability and conductivity of cardiac muscle and has been used in the treatment of cardiac arrhythmias. Small doses stimulate and large doses paralyse the autonomic ganglia. Peripherally, it has a fairly strong curare-like action, arresting respiration by paralyzing the phrenic endings.

The metabolic oxidation of sparteine exhibits genetic polymorphism and this property has been exploited in *in-vitro* screening tests to identify other drugs that may be subject to similar genetic variations in their metabolism.

**Precautions.** Sparteine present in a herbal slimming preparation might cause adverse effects in slow metabolisers if excessive doses were ingested; pregnant women might be particularly at risk.<sup>1</sup>

1. Galloway JH, *et al.* Potentially hazardous compound in a herbal slimming remedy. *Lancet* 1992; **340**: 179.

**Preparations****Proprietary Preparations** (details are given in Part 3)**Multi-ingredient:** **Braz.:** Belacodid†.**Spearmint**

Menta; Mentha Viridis; Menthae Crispae Folium; Mint.

**Profile**

Spearmint consists of the dried leaves and flowering tops of common spearmint, *Mentha spicata* (*M. viridis*) or of scotch spearmint (*M. cardiaca*) (Labiatae). Spearmint is the source of spearmint oil (below). It has carminative properties and is used as a flavour.

**Preparations****Proprietary Preparations** (details are given in Part 3)**Braz.:** Giamebil†.

**Multi-ingredient:** **Chile:** Te Laxante; **Cz.:** Hertz- und Kreislauftee†; **Fr.:** Mediflor; Tisane Digestive No 3; **Switz.:** Gel à la consoude; Tisane antirhumatisme; Tisane pour l'estomac; Tisane pour le coeur et la circulation; Tisane pour le sommeil et les nerfs.

**Spearmint Oil**

Huile Essentielle de Menthe Crépue; Menta, aceite esencial de; Oleum Menthae Crispae; Oleum Menthae Viridis.

**Pharmacopoeias.** In *Br.* and *Fr.*

**BP 2008** (Spearmint Oil). It is obtained by distillation from fresh flowering plants of *Mentha spicata* or *Mentha × cardiaca*. A clear colourless, pale yellow or greenish-yellow liquid when freshly distilled, visibly free from water and with the odour of spearmint. It becomes darker and viscous on keeping. It contains not less than 55% w/w of carvone. Soluble 1 in 1 of alcohol (80%) at 20°; the solution may become cloudy when diluted. Store at a temperature not exceeding 25° in well-filled containers. Protect from light.

**Profile**

Spearmint oil has similar properties to peppermint oil (p.1761) and is used as a carminative and as a flavour. It is also used in aromatherapy.

**Allergy.** Allergic contact cheilitis in a patient has been attributed to the spearmint oil present in tooth paste.<sup>1</sup>

1. Skrebova N, *et al.* Allergic contact cheilitis from spearmint oil. *Contact Dermatitis* 1998; **39**: 35.

**Preparations****Proprietary Preparations** (details are given in Part 3)

**Multi-ingredient:** **Austria:** Euka; **Chile:** Polvos Alcalinos; **Cz.:** Parodontal F5†; **Indon.:** Listerine Coolmint; **Ital.:** Dentosan Azione Intensiva; Dentosan Mese; **Philipp.:** Listerine Coolmint; **Switz.:** Alvoxy; **UK:** Fre-bre; Profelan.

**Spike Lavender**

Lavande aspic.

**Profile**

Spike lavender, *Lavandula latifolia* (Lamiaceae), is used similarly to lavender (p.2331) as a sedative and for biliary disorders. It is the source of spike lavender oil (below).