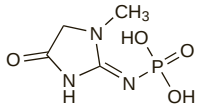
Fosfocreatinine *(rINN)*

Fosfocreatinina; Fosfocréatinine; Fosfocreatininum; Phosphocreatinine. (1-Methyl-4-oxo-2-imidazolidinylidene)phosphoramidic acid.

Фосфокреатинин

$C_4H_8N_3O_4P$ = 193.1.

CAS — 5786-71-0 (fosfocreatinine); 19604-05-8 (fosfocreatinine sodium).



Profile

Fosfocreatinine or fosfocreatinine sodium has been used in muscle disorders.

Preparations

Proprietary Preparations (details are given in Part 3)
Ital.: Sustenium.

Fosfructose Trisodium *(USAN, rINNM)*

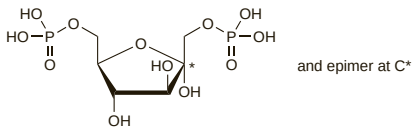
CPC-111; Fosfructosa trisódica; Fosfructose Trisodique; Fosfructosum; Sodium Fructose-1,6-diphosphate. D-Fructose 1,6-bis(dihydrogen phosphate) trisodium octahydrate.

Тринатрий Фосфруктоза

$C_6H_{11}Na_3O_{12}P_2,8H_2O$ = 550.2.

CAS — 488-69-7 (fosfructose); 6055-82-9 (fosfructose calcium); 38099-82-0 (fosfructose trisodium); 81028-91-3 (fosfructose trisodium octahydrate);.

ATC — C01EB07.



and epimer at C*

(fosfructose)

Profile

Fosfructose is a metabolic intermediate. It is used as the trisodium salt as a source of phosphate in deficiency states and in total parenteral nutrition, and has also been used to protect against ischaemic tissue damage. Fosfructose calcium has also been promoted for a variety of disorders.

Preparations

Proprietary Preparations (details are given in Part 3)
Hong Kong: Esafosfina; ***Ital.:*** Esafosfina; FDP; Frut†; ***Thai.:*** Esafosfina.
Multi-ingredient: ***Hong Kong:*** Esafosfina Glutammica; ***Ital.:*** Esaglut†.

Frankincense

Olibanum; Ru Xiang.

Ладан

CAS — 8016-36-2 (frankincense oil).

NOTE. Distinguish from Indian Frankincense, below.

Profile

Frankincense is the aromatic gum resin of *Boswellia sacra* (*B. carteri*) (Burseraceae) or other species of *Boswellia*. It is used in incense and as a fumigant.

Frankincense (ru xiang) is also used in Chinese medicine. Frankincense oil is used in aromatherapy.

Indian Frankincense

Encens indien; Indian Olibanum; Olibanum indicum; Salai Guggal.

NOTE. Indian frankincense is obtained from *Boswellia serrata* and should be distinguished from Frankincense (above) obtained from other species of *Boswellia*.

Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Indian Frankincense). Air-dried gum-resin exudate, obtained by incision in the stem or branches of *Boswellia serrata*. It contains a minimum of 1.0% of 11-keto-β-boswellic acid ($C_{30}H_{46}O_4$ = 470.7) and a minimum of 1.0% of acetyl-11-keto-β-boswellic acid ($C_{32}H_{48}O_5$ = 512.7) calculated with reference to the dried drug.

Profile

Indian frankincense is the gum resin of *Boswellia serrata* (*B. glabra*) (Burseraceae). It has anti-inflammatory activity and is included in herbal preparations for musculoskeletal and joint disorders. It is also under investigation for use in inflammatory bowel disease and asthma. Boswellic acids extracted from the gum resin of *B. serrata* have also been tried for their anti-inflammatory actions in similar disorders.

◊ References.

1. Gupta I, *et al.* Effects of Boswellia serrata gum resin in patients with ulcerative colitis. *Eur J Med Res* 1997; **2:** 37–43.
2. Gupta I, *et al.* Effects of Boswellia serrata gum resin in patients with bronchial asthma: results of a double-blind, placebo-controlled, 6-week clinical study. *Eur J Med Res* 1998; **3:** 511–14.
3. Gupta I, *et al.* Effects of gum resin of Boswellia serrata in patients with chronic colitis. *Planta Med* 2001; **67:** 391–5.
4. Kimmatkar N, *et al.* Efficacy and tolerability of Boswellia serrata extract in treatment of osteoarthritis of knee—a randomized double blind placebo controlled trial. *Phytomedicine* 2003; **10:** 3–7.
5. Ammon HPT. Boswellic acids in chronic inflammatory diseases. *Planta Med* 2006; **72:** 1100–16.

Preparations

Proprietary Preparations (details are given in Part 3)
Multi-ingredient: ***Arg.:*** Glucobefol; ***Austral.:*** Bioglan Joint Mobility; Boswellia Complex; Boswellia Compound; ***Ital.:*** Actires; Fitogenase; Reumafort; Revios; ***Malaysia:*** Rumalaya; ***Singapore:*** Artrex†; ***UK:*** NatraFlex; PainEaze.

Fucoidan

Fucoidin; Fucoidine; Nemacystus Mucilage.

Фукоидан

CAS — 9072-19-9.

Profile

Fucoidan is a sulfated polysaccharide, based mainly on L-fucose, that is extracted from brown seaweed. It is reported to have anticoagulant, antithrombotic, and antineoplastic activity and has been promoted for a wide-range of disorders and as a food supplement.

◊ References.

1. Mourão PA. Use of sulfated fucans as anticoagulant and antithrombotic agents: future perspectives. *Curr Pharm Des* 2004; **10:** 967–81.

Nomenclature. Fucans are a class of sulfated polysaccharides first isolated from marine algae. Their nomenclature can be somewhat varied and confusing. The original polysaccharide isolated from algae was termed fucoidin and this was later changed to fucoidan. These polysaccharides have also been found in marine invertebrates and improved analytical and separation techniques have allowed different types of sulfated polysaccharides to be identified. It has been suggested that the term sulfated fucan should be defined as a polysaccharide based mainly on sulfated L-fucoses, with less than 10% other monosaccharides.[1] This term has been applied to the sulfated fucans of marine invertebrates, whereas the term fucoidan has been used for fucans extracted from algae. Some define fucoidan as a sulfated polysaccharide of L-fucose and D-galactose extracted from brown seaweed although others have used this term for sulfated polysaccharide complexes having a content of L-fucose of only 60% or less. Other terms that have been coined for these compounds include fucansulfate and fucan sulfate.

1. Berteau O, Mulloy B. Sulfated fucans, fresh perspectives: structures, functions, and biological properties of sulfated fucans and an overview of enzymes active toward this class of polysaccharide. *Glycobiology* 2003; **13:** 29R–40R.

Preparations

Proprietary Preparations (details are given in Part 3)
Indon.: Mozuku.

Fumitory

Erdrauchkraut; Fumaria; Fumariae herba; Fumeterre; Zemědýmová nať; Ziele dymnicy.

Дымовая Трава; Дымянка Лекарственная

Pharmacopoeias. In *Eur.* (see p.vii).
Ph. Eur. 6.2 (Fumitory). The whole or fragmented, dried aerial parts of *Fumaria officinalis* harvested in full bloom. It contains a minimum of 0.40% of total alkaloids, expressed as protopine ($C_{20}H_{19}NO_5$ = 353.4). Protect from light.

Profile

Fumitory comprises the dried or fresh flowering plant *Fumaria officinalis* (Papaveraceae) and is used in herbal medicine. It is an ingredient of preparations used mainly for gastrointestinal and biliary-tract disorders.

Homoeopathy. Fumitory has been used in homoeopathic medicines under the following names: Fumaria officinalis.

Irritable bowel syndrome. Neither fumitory nor Javanese turmeric (p.2406) was effective in a study[1] in patients with irritable bowel syndrome.

1. Brinkhaus B, *et al.* Herbal medicine with curcuma and fumitory in the treatment of irritable bowel syndrome: a randomized, placebo-controlled, double-blind clinical trial. *Scand J Gastroenterol* 2005; **40:** 936–43.

Preparations

Proprietary Preparations (details are given in Part 3)
Austria: Bilobene; Oddibil; ***Braz.:*** Oddibil; ***Fr.:*** Oddibil; ***Ger.:*** Bilobene; Bomagall mono†; Oddibil†; ***Hung.:*** Bilobene; ***Pol.:*** Amphochol.
Multi-ingredient: ***Austria:*** Hepabene; Oddispasmol; ***Cz.:*** Hepabene†; ***Fr.:*** Actibil†; Bolcitol; Depuratif Parnel; Depuratum; Schoum; ***Hung.:*** Hepabene; ***Ital.:*** Soluzione Schoum; ***Pol.:*** Boldovera; ***Rus.:*** Hepabene (Гепабене); ***Spain:*** Natusor Hepavesical†; Odisor†; Solucion Schoum; ***UK:*** Echinacea; Skin Cleansing.

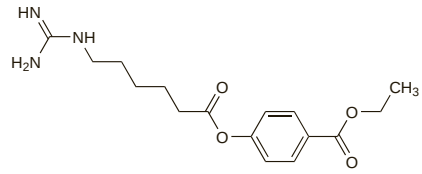
Gabexate Mesilate *(rINNM)*

Gabexate, Mésilate de; Gabexate Mesylate; Gabexati Mesilas; Mesilato de gabexato. Ethyl 4-(6-guanidinohexanoyloxy)benzoate methanesulphonate.

Габексата Мезилат

$C_{16}H_{23}N_3O_4,CH_4SO_3$ = 417.5.

CAS — 39492-01-8 (gabexate); 56974-61-9 (gabexate mesilate).



(gabexate)

Pharmacopoeias. In *Jpn.*

Profile

Gabexate mesilate is a proteolytic enzyme inhibitor that has been used for the treatment of pancreatitis (p.2361) in an initial dose of 100 to 300 mg daily given by intravenous infusion. The dose may be reduced, or a further 100 to 300 mg given on the same day, according to response. It has also been used for disseminated intravascular coagulation (p.1048) in a dose of 20 to 39 mg/kg given as a continuous intravenous infusion over 24 hours. Hypersensitivity reactions including anaphylaxis have occurred.

◊ References.

1. Messori A, *et al.* Effectiveness of gabexate mesilate in acute pancreatitis: a metaanalysis. *Dig Dis Sci* 1995; **40:** 734–8.
2. Cavallini G, *et al.* Gabexate for the prevention of pancreatic damage related to endoscopic retrograde cholangiopancreatography. *N Engl J Med* 1996; **335:** 919–23.
3. Matsukawa Y, *et al.* Anaphylaxis induced by gabexate mesylate. *BMJ* 1998; **317:** 1563.
4. Ranucci M, *et al.* Gabexate mesilate and antithrombin III for intraoperative anticoagulation in heparin pretreated patients. *Perfusion* 1999; **14:** 357–62.
5. Matsukawa Y, *et al.* Fatal cases of gabexate mesilate-induced anaphylaxis. *Int J Clin Pharmacol Res* 2002; **22:** 81–3.
6. Masci E, *et al.* Comparison of two dosing regimens of gabexate in the prophylaxis of post-ERCP pancreatitis. *Am J Gastroenterol* 2003; **98:** 2182–6.
7. Andriulli A, *et al.* Prophylaxis of ERCP-related pancreatitis: a randomized, controlled trial of somatostatin and gabexate mesylate. *Clin Gastroenterol Hepatol* 2004; **2:** 713–18.
8. Hsu JT, *et al.* Efficacy of gabexate mesilate on disseminated intravascular coagulation as a complication of infection developing after abdominal surgery. *J Formos Med Assoc* 2004; **103:** 678–84.
9. Rudin D, *et al.* Somatostatin and gabexate for post-endoscopic retrograde cholangiopancreatography pancreatitis prevention: meta-analysis of randomized placebo-controlled trials. *J Gastroenterol Hepatol* 2007; **22:** 977–83.

Preparations

Proprietary Preparations (details are given in Part 3)
Ital.: Foy; ***Jpn:*** Foy.

Gall

Agallas de roble; Aleppo Galls; Blue Galls; Duběnka; Galla; Galläpfel; Galls; Noix de Galle; Nutgall.

Чернильный Орешек

Pharmacopoeias. In *Chin.*

Profile

Gall is the excrescences on the twigs of *Quercus infectoria* (Fagaceae), resulting from the stimulus given to the tissues of the young twigs by the development of the larvae of the gall-wasp, *Adleria gallae-tinctoriae* (*Cynips gallae-tinctoriae*) (Cynipidae). It contains about 50 to 70% of gallotannic acid.

Gall is an astringent and has been used in ointments and suppositories for the treatment of haemorrhoids. It is a source of tannic acid (p.2394).

Preparations

Proprietary Preparations (details are given in Part 3)
Spain: Litiax.