## **Pharmacokinetics**

Gliclazide is readily absorbed from the gastrointestinal tract. It is extensively bound to plasma proteins. The half-life is about 10 to 12 hours. Gliclazide is extensively metabolised in the liver to metabolites that have no significant hypoglycaemic activity. Metabolites and a small amount of unchanged drug are excreted in the urine.

# ◊ References.

Kobayashi K, et al. Pharmacokinetics of gliclazide in healthy and diabetic subjects. J Pharm Sci 1984; 73: 1684–7.

## Uses and Administration

Gliclazide is a sulfonylurea antidiabetic (p.460). It is given orally in the treatment of type 2 diabetes mellitus (p.431) and has a duration of action of 12 to 24 hours. Because its effects are less prolonged than those of chlorpropamide or glibenclamide it may be more suitable for elderly patients, who are prone to hypoglycaemia with longer-acting sulfonylureas. The usual initial dose is 40 to 80 mg daily, gradually increased, if necessary, up to 320 mg daily. Doses of more than 160 mg daily are given in 2 divided doses. A modified-release tablet is also available: the usual initial dose is 30 mg once daily, increased if necessary up to a maximum of 120 mg daily.

#### References.

- 1. Palmer KJ, Brogden RN. Gliclazide: an update of its pharmaco-
- France KJ, Diogden KA, Oncazte, an update of its pharmaco-logical properties and therapeutic efficacy in non-insulin-de-pendent diabetes mellitus. *Drugs* 1993; 46: 92–125.
   Mailhot J. Efficacy and safety of gliclazide in the treatment of non-insulin-dependent diabetes mellitus: a Canadian multicenter study. *Clin Ther* 1993; 15: 1060–8.
- Ziegler O, Drouin P. Hemobiological properties of gliclazide. J Diabetes Complications 1994; 8: 235–9.
- Jennings PE. Vascular benefits of gliclazide beyond glycemic control. *Metabolism* 2000; 49 (suppl 2): 17–20.
   Crepaldi G, Fioretto P. Gliclazide modified release: its place in
- the therapeutic armamentarium. Metabolism 2000; 49 (suppl 2):
- McGavin JK, et al. Gliclazide modified release. Drugs 2002; 62: 1357–64.

# Preparations

BP 2008: Gliclazide Tablets.

BP 2008: Glicdazide Tablets. Proprietary Preparations (details are given in Part 3) Arg.: Aglucide; Diamicron; Unava; Austrol.: Diamicron; Glyade; Nidem; Oziclide; Austria: Diamicron; Belg.: Diamicron; Uni Diamicron; Braz.: Azukon; Diamicron; Glicaron; Genda: Diamicron; Uni Diamicron; Graz.: Diabrezide; Diapret: Demm: Diamicron; Fr.: Diamicron; Ger.: Diamicron; Gra: Diamicron; Glicaron; Cendd.: Diamicron; Diamicron; Ger.: Diamicron; Gra: Diamicron; Glicaron; Cendd.: Diamicron; Diamicron; Ger.: Diamicron; Gra: Diamicron; Hong Kong: CP-Gliz; Diamicron; Diamicron; Gilza; Glizdi; Glycigon; Glycinorm; Glygard; Lycazid; Semi-Glycigon; Indon.: Diamicron; Ferdam; Glicale; Glidabet (Glucodex; Glucored; Glukolos; Glyca-for; Linodiab; Metlika; Nufamicron; Reda; Tiaglib; Xepabet; Zumadiac; Int.: Diabrezide; Diaclide; Diamicron; Reda; Tiaglib; Xepabet; Zumadiac; Int.: Diabrezide; Glucobloc; Molloysia: Diacron†; Diamicron; Glizo; Glinorma; Clicz; Diabet; Oladbet; Diamicron; Diamicron; Glizo; Glinormax; Norsulin; Port: Diamicron; Ruz: Diabet; (Juader;); Glucozide; Glinormax; Norsulin; Port: Diamicron; Ruz: Diabet; Diazide; Diabrezide; Diabinax (Δμαδι+μack); Diatica (Δματηκα;); Glucozide; Diamicron; Glucozide; Glycon; Glygar; Ziclin; Singopore; Diamicron; Diane; Dianore; Glucozide; Glycon; Glygar; Ziclin; Singopore; Diamicron; Diane; Dianore; M: Glucide; Glycon; Glygar; Ziclin; Singopore; Diamicron; Diane; Dianore; M: Glucide; Glycon; Kelde; Medochazide; Medicak; Medica; Medica; Medica; Medicak; Medicak; Medica; Medicak; Med Diamicron; Glucomet; Gycron; Glygard; Ziclin; Singebore: Diamicron; Diamicron; Glucomet; Gycron; Glygard; Ziclin; Singebore: Diamicron; Jinicron; Glizide; Glucozide; Medoclazide; Melicron†; Spain: Diamicron; Uni Diamicron; Switz: Diamicron; Thai: Cadicon; Diabeside; Dialaronf, Dianaterb, Jamicon, Jamicon, Dianicon, Dialesue, Dialaronf, Diamazet, Diamexon, Diamicon, Diani, Glicon, Glucocron, Glucozide, Glycon, Medoclazide, Serviclazide, **Turk:** Betanorm, Diamicron, Glazid, Glumikron, Cramikron, **UAE**: Glyzide, **UK**: Diaglyk; Diamicron; **Venez:** Diamicron; Glidan; Reclide†.

Multi-ingredient: India: Exermet GZ; Gliclamet; Glizid-M; Glycigon-M; Glycinorm M; Glygard M; Glyroz.

## Glimepiride (BAN, USAN, HNN)

Glimepirid; Glimepirida; Glimépiride; Glimepiridi; Glimepiridum; Glimepiryd; Hoe-490. I-({p-[2-(3-Ethyl-4-methyl-2-oxo-3-pyrroline-I-carboxamido)ethyl]phenyl}sulfonyl)-3-(trans-4-methylcyclohexyl)urea.

Глимепирид  $C_{24}H_{34}N_4O_5S = 490.6.$ CAS — 93479-97-1. ATC — A10BB12. ATC Vet - QAIOBBI2.

#### Pharmacopoeias. In Eur. (see p.vii) and US.

Ph. Eur. 6.2 (Glimepiride). A white to almost white powder. It exhibits polymorphism. Practically insoluble in water; slightly soluble in dichloromethane; soluble in dimethylformamide; very slightly soluble in methyl alcohol.

USP 31 (Glimepiride). A white to almost white powder. Practically insoluble in water; sparingly soluble in dichloromethane; soluble in dimethylformamide; slightly soluble in methyl alcohol. It dissolves in dilute alkali hydroxides and in dilute acids. Store at a temperature not exceeding 25°

#### Adverse Effects, Treatment, and Precautions

As for sulfonylureas in general, p.460. In some countries hepatic and haematological monitoring is recommended in patients receiving glimepiride; in the UK the BNF considers the practical value of such monitoring unproven.

Fasting. Glimepiride, given in unchanged doses but with the time of the single daily dose switched from morning to just be-fore breaking fast after sunset, was used in Muslim patients during Ramadan without causing an increased incidence of hypoglycaemic episodes.1

For further advice on the management of diabetes mellitus in fasting Muslim patients during Ramadan see under Precautions of Insulin, p.448.

1. The Glimepiride in Ramadan (GLIRA) Study Group. The efficacy and safety of glimepiride in the management of type 2 diabe-tes in Muslim patients during Ramadan. *Diabetes Care* 2005; 28: 421 - 2

# Interactions

As for sulfonylureas in general, p.461.

**Pharmacokinetics** Glimepiride is completely absorbed from the gastrointestinal tract. Peak plasma concentrations occur in 2 to 3 hours, and it is highly protein bound. The drug is extensively metabolised to two main metabolites, a hydroxy derivative and a carboxy derivative. The half-life after multiple doses is about 9 hours. About 60% of a dose is eliminated in the urine and 40% in the faeces.

#### Uses and Administration

Glimepiride is a sulfonylurea antidiabetic (p.460). It is given orally for the treatment of type 2 diabetes mellitus (p.431). Initial doses of 1 to 2 mg daily may be increased if necessary to 4 mg daily for maintenance. The maximum recommended dose is 6 mg in the UK and 8 mg in the USA.

◊ References.

- 1. Langtry HD, Balfour JA. Glimepiride: a review of its use in the management of type 2 diabetes mellitus. Drugs 1998; 55: 563-84
- 2. Campbell RK. Glimepiride: role of a new sulfonylurea in the treatment of type 2 diabetes mellitus. Ann Pharmacother 1998; **32:** 1044–52
- 3. McCall AL. Clinical review of glimepiride. Expert Opin Pharmacother 2001; 2: 699-713.
- Massi-Benedetti M. Glimepiride in type 2 diabetes mellitus: a review of the worldwide therapeutic experience. *Clin Ther* 2003; 25: 799-816.
- 5. Weitgasser R, et al. Effects of glimepiride on HbA(1c) and body weight in type 2 diabetes: results of a 1.5-year follow-up study Diabetes Res Clin Pract 2003; 61: 13-19.
- 6. Feinbock C, et al. Prospective multicentre trial comparing the efficacy of, and compliance with, glimepiride or acarbose treat-ment in patients with type 2 diabetes not controlled with diet alone. *Diabetes Nutr Metab* 2003; **16:** 214–21.

#### Preparations

USP 31: Glimepiride Tablets.

Proprietary Preparations (details are given in Part 3)

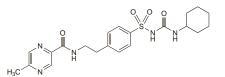
Proprietary Preparations (details are given in Part 3)
Arg.: Adiuvar, Amaryl: Endial; Glemaz; Gluceride; Glucopirida; Islopir; Lomet; Next Step. Austral: Amaryl; Aylide; Diapride; Diamiel; Austria: Amaryl; Belg.: Amarylie; Braz.: Amaryl; Azulix; Bioglic; Diamellitis; Glimepiba; Glimepib; Glimepiba; Glimepiba; Glimepiba; Glemaz; Gluceride; Carada: Amaryl; Chile: Amaryl; Glemaz; Gluceride; Glynexan; Melyd; Metsi's Otar; Denmar; Amaryl; Fin: Amaryl; Fin: Amaryl; Ger.: Amaryl; Glimegiba; Glemai; Glimepiba; Glimepiba; Glimepiba; Maryl; Fin: Amaryl; Fin: Amaryl; Glimeganma; Glimerid; Gar.: Amaryl; Glimegiba; Glimepiba; Glosa; Sucry; Tiop II; Toremol; Hong Kong; Amaryl; Diapride; Hung: Amaryl; Dialosa; Glemepid; Glimety, Diapride; Hung: Amaryl; Dialosa; Glemepid; Glimety, Glimeta; Glimerex; Glimeta; Maryl; Betaglim; Diapride; Hung: Amaryl; Calimata; Glimelin; Glimety; Glimeta; Maryl; Melyd; Melyd; Sintecal; India: Amaryl; Glimeta; Karmelitos; Indon.: Amadiab; Amaryl; Anpirde; Glamaryl; Hatayaryl; Sardaya Amaryl; Baryl; Sardayaryl; Baryl; Sardaya Amaryl; Bardaya Amaryl; Narrississ, meori, Annavia, Annavi, Anpinet, Staffaro, Ginnekal, Gluv vas; Mapryl; Metrix; Relide; Int.: Amaryl; Israel: Amaryl; Ital.: Amaryl; So-Iosa, Malaysia: Amaryl; Diapride; Glimaryl; Glivnin; Glimulin; Miaryl; Mex.: Amaryl; Glupropan, Zukedib; Neth.: Amaryl; Norw.: Amaryl; NZ: Amaryl; Philipp: Imendi, Norizec; Solosa; Pol.: Amaryl; Amyx; Avaron; Betaglid; Diaril; Glemid; Glibetic; Glibezid; Glidiamid; Glimehaxal; Glimesan; Glipid; Limeral; Melyd; Oltar; Pemidal; Symglic; Port.: Amaryl; Diapiride; Glimial; Limeral; Preyd, Ollar; Perlinaa, syngire, Porte, Perlana; Graganice, Caranyi, Gludon; Ruxs: Amaryl; (Amapuk); Glemaz (Trawas); S.Afr.: Amaryl; Glamaryl; Singepore: Amaryl; Diapride; Spolin: Amaryl; Roname; Swed: Amaryl; Switz: Amaryl; Thal: Amaryl; Turk:: Amaryl; Diameprid; Glimax; UK: Amaryl; Niddaryl; USA: Amaryl; Yenez: Amaryl; Dimavyl; Glimerid.

Multi-ingredient: Cz.: Avaglim; Tandemact; Fr.: Avaglim; Tandemact; Gr. Avaglim, Hung.: Avaglim; India: Betaglim M; Evernet GM; Glimiprex MF; Glimulin-MF; Indon.: Avandary! Mex.: Glimetal; Port.: Avaglim; Tan-demact; USA: Avandary!; Duetact.

# Glipizide (BAN, USAN, pINN)

CP-28720; Glipitsidi; Glipizid; Glipizida; Glipizidas; Glipizidum; Glipizyd; Glydiazinamide; K-4024. I-Cyclohexyl-3-{4-[2-(5-methylpyrazine-2-carboxamido)ethyl]benzenesulphonyl}urea. Глипизид

 $C_{21}H_{27}N_5O_4S = 445.5.$ CAS - 29094-61-9. ATC — AIOBBO7. ATC Vet - QAIOBBO7.



Pharmacopoeias. In Chin., Eur. (see p.vii), and US. Ph. Eur. 6.2 (Glipizide). A white or almost white crystalline powder. Practically insoluble in water and in alcohol; very slightly soluble in acetone and in dichloromethane. It dissolves in dilute solutions of alkali hydroxides.

USP 31 (Glipizide). Store in airtight containers. Protect from light.

## Adverse Effects, Treatment, and Precautions

As for sulfonylureas in general, p.460.

Porphyria. Glipizide has been associated with acute attacks of porphyria and is considered unsafe in porphyric patients

#### Interactions

As for sulfonylureas in general, p.461.

Antacids. Magnesium hydroxide and sodium bicarbonate have been reported to increase the rate of absorption, although not the total amount absorbed, of a dose of glipizide in healthy subjects.1,2 No such effect was seen with aluminium hydroxide

- 1. Kivisto KT, Neuvonen PJ. Enhancement of absorption and effect of glipizide by magnesium hydroxide. Clin Pharmacol Ther 1991: 49: 39-43.
- 2. Kivisto KT, Neuvonen PJ. Differential effects of sodium bicarbonate and aluminium hydroxide on the absorption and activity of glipizide. Eur J Clin Pharmacol 1991; 40: 383-6.

#### **Pharmacokinetics**

Glipizide is readily absorbed from the gastrointestinal tract with peak plasma concentrations occurring 1 to 3 hours after a single dose. It is extensively bound to plasma proteins and has a half-life of about 2 to 4 hours. It is metabolised mainly in the liver and excreted chiefly in the urine, largely as inactive metabolites.

## **Uses and Administration**

Glipizide is a sulfonylurea antidiabetic (p.460). It is given orally in the treatment of type 2 diabetes mellitus (p.431) and has a duration of action of up to 24 hours. The usual initial dose is 2.5 to 5 mg daily given as a single dose about 30 minutes before breakfast. Dosage may be adjusted at intervals of several days by amounts of 2.5 to 5 mg daily, to a maximum of 20 mg daily. Doses up to 40 mg daily have been used, but see below. Doses larger than 15 mg daily are given in two divided doses before meals. Modified-release formulations of glipizide are available in some countries; one such preparation (Glucotrol XL; Pfizer, USA) is given in doses of 5 to 10 mg daily as a single dose with breakfast.

Administration. Although glipizide may be given in doses up to a maximum of 40 mg daily, evidence for the benefits of high doses is scanty. A small study in patients with type 2 diabetes mellitus found that not only did increases in glipizide doses to more than 10 mg daily produce little or no benefit, but that the higher doses were associated with reduced rises in plasmainsulin concentrations and a lesser reduction in plasma-glucose concentrations.1 There is, however, some evidence that glycaemic control and insulin sensitivity can be improved by the use of a modified-release rather than a conventional formulation of glipizide.2,3

- 1. Stenman S, et al. What is the benefit of increasing the sulfonylurea dose? Ann Intern Med 1993; **118**: 169-72. 2. Berelowitz M, *et al.* Comparative efficacy of once-daily control-
- led-release formulation of glipizide and immediate-release glip-izide in patients with NIDDM. *Diabetes Care* 1994; **17**: 1460–4.
- Leaf E, King JO. Patient outcomes after formulary conversion from immediate-release to extended-release glipizide tablets. *Am J Health-Syst Pharm* 1999; 56: 454–6.

# 442 Antidiabetics

# **Preparations**

BP 2008: Glipizide Tablets; USP 31: Glipizide and Metformin Hydrochloride Tablets; Glipizide Tablets.

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

Proprietary Preparations (details are given in Part 3) Arg: Minodiab; Austrol.: Melizide; Minidiab; Matsria: Gilbenese; Minidiab; Belg: Gilbenese; Minidiab; Broz.: Gilgen†, Minidiab; Chile: Minidiab; Kiprine: Cz: Antidiab†; Glucotrol†; Mediab†; Minidiab; Chile: Minidiab; Fin: Gilbenese; Minidiab†; Hong Kong: Dasef; Glucotrol; Mi-nidiab; Sunglucon; Hung: Minidiab; India: Dagip; Glez; Gilde; Glipicontir†; Glucolp; Gynas; Gyzp; Indon: Aldiab; Glucotrol; Mi-nidiab; Sunglucon; Hung: Minidiab; India: Dibenese; Minid-iab; Ozidia; Gr.: Glibenese; Minodiab; India: Dagip; Glez; Glide; Glipicontir†; Glucolp; Gynas; Gyzp; Indon: Aldiab; Glucotrol; Gyzid; Hi.: Glibenese; Indiab; Marciab; Mex: Gluptie†; Ludite; Minodiab; Piglos; Singoben; Neth:: Glibenese; Norw: Apamid; Mindiab; NZ: Glipid†; Minidiab; Philipp:: Glix, Minidiab; Pol.: Antidiab; Glibenese; Port: Minidiab; Rus: Glibenese; Chufenes); Minidab (Melavaiab); S.Afr: Minidiab; Singo-pore: Beapizide; Diastir; Diasef; Melizide; Minidiab; Spain; Glibenese; Thai: Apamid†; Depizide; Diasef; Dipazide; Gipzide; Glipiened; Glizde; Glucodiab; Glygen; GP-Zide; Melizide; Minidiab; USA: Glucotrol; Venez: Minidiab; Glucotrol; Mez: Holizide; Thuficiab; Minidiab; Mez: Glibenese; Minid-Glipenese; Minidiab; Mixiab; Minidiab; Marnedia; Peizde; Glucodiab; Glygen; GP-Zide; Melizde; Minidiab; USA: Glucotrol; Venez: Minidiab; Mixiab; Mixiab; USA; Glucotrol; Venez: Minidiab; Mixiab; Mixia cotrol; Minidiab; UK: Glibenese; Minodiab; USA: Glucotrol; Venez.: Minid

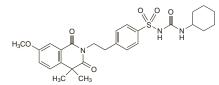
Multi-ingredient: India: Diaglip M; Metaglez; USA: Metaglip.

#### Gliauidone (BAN, rINN)

ARDF-26; Glikidon; Glikidoni; Gliquidona; Gliquidonum. I-Cyclohexyl-3-{4-[2-(3,4-dihydro-7-methoxy-4,4-dimethyl-1,3-dioxo-2(1H)-isoquinolyl)ethyl]benzenesulphonyl}urea.

#### Гликвидон

 $C_{27}H_{33}N_3O_6S = 527.6.$ CAS — 33342-05-1. ATC - AIOBBO8 ATC Vet - QAIOBBO8.



#### Pharmacopoeias. In Br. and Chin.

BP 2008 (Gliquidone). A white or almost white powder. Practically insoluble in water; slightly soluble in alcohol and in methyl alcohol; soluble in acetone; freely soluble in dimethylformamide.

### Adverse Effects, Treatment, and Precautions

As for sulfonylureas in general, p.460.

#### Interactions

As for sulfonylureas in general, p.461.

### **Pharmacokinetics**

Gliquidone is readily absorbed from the gastrointestinal tract. It is extensively bound to plasma proteins and has a half-life of about 1.5 hours. It is extensively metabolised in the liver, the metabolites having no significant hypoglycaemic effect, and is eliminated chiefly in the faeces via the bile; only about 5% of a dose is excreted in the urine

#### **Uses and Administration**

Gliquidone is a sulfonylurea antidiabetic (p.460). It has been given orally in the treatment of type 2 diabetes mellitus (p.431) in a usual initial dosage of 15 mg daily given as a single dose up to 30 minutes before breakfast. Dosage may be adjusted by incre-ments of 15 mg to a usual dose of 45 to 60 mg daily in 2 or 3 unequally divided doses, the largest dose being taken in the morning with breakfast. Single doses above 60 mg and daily doses above 180 mg are not recommended.

#### Preparations

#### BP 2008: Gliquidone Tablets.

Proprietary Preparations (details are given in Part 3)

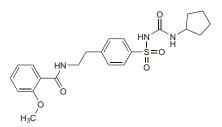
Austria: Glurenorm; Belg.: Glurenorm; Cz.: Glurenorm; Ger.: Glurenorm; Gr.: Devotan; Hung.: Glurenorm; Indon.: Glurenorm; Ital: Glurenor: Pol.: Glurenorm; Port.: Glurenorf; Rus.: Glurenorm (TAropenopw); Spain: Glurenor; Thai.: Glurenor; Turk.: Glurenorm; UK: Churgeromk) Glurenorm†.

## Glisentide (rINN)

Glipentide; Glisentida; Glisentidum. I-Cyclopentyl-3-[p-(2-o-anisamidoethyl)benzenesulphonyl]urea.

#### Глизентил

 $C_{22}H_{27}N_3O_5S = 445.5.$ CAS - 32797-92-5.



#### Profile

Glisentide is a sulfonylurea antidiabetic (p.460). It is given orally in the treatment of type 2 diabetes mellitus (p.431) in doses of 2.5 to 20 mg daily.

#### Preparations

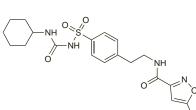
Proprietary Preparations (details are given in Part 3) Sbain: Staticum

# Glisolamide (rINN)

Glisolamida; Glisolamidum. I-Cyclohexyl-3-{p-[2-(5-methylisoxazole-3-carboxamido)ethyl]benzenesulphonyl}urea.

#### Глизоламид

 $C_{20}H_{26}N_4O_5S = 434.5.$ CAS - 24477-37-0.



#### Profile

Glisolamide is a sulfonylurea antidiabetic (p.460). It has been given in the treatment of type 2 diabetes mellitus.

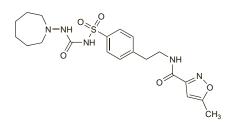
## Preparations

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

## Glisoxepide (BAN, rINN)

Bay-b-4231; FBB-4231; Glisoxepid; Glisoxepida; Glisoxépide; Glisoxepidum; RP-22410. I-(Perhydroazepin-I-yl)-3-{4-[2-(5methylisoxazole-3-carboxamido)ethyl]benzenesulphonyl}urea.

 $C_{20}H_{27}N_5O_5S = 449.5.$ CAS - 25046-79-1 ATC — AIOBBII. ATC Vet - QAIOBBII.



#### Profile

Glisoxepide is a sulfonylurea antidiabetic (p.460). It has been given in the treatment of type 2 diabetes mellitus.

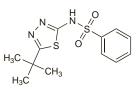
### Preparations

Proprietary Preparations (details are given in Part 3) Austria: Pro-Diaban†.

## Glybuzole (rINN)

AN-1324: Désaglybuzole: Glibuzol: Glybuzolum: RP-7891, N-(5tert-Butyl-1,3,4-thiadiazol-2-yl)benzenesulphonamide. Глибузол

 $C_{12}H_{15}N_3O_2S_2 = 297.4.$ CAS - 1492-02-0.



#### Profile

Glybuzole is an oral antidiabetic with a structure distinct from that of the sulfonylureas, biguanides, or sulfonamidopyrimidines.

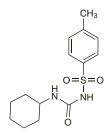
#### Preparations

Proprietary Preparations (details are given in Part 3) Jpn: Gludiase

# Glycyclamide (rINN)

Gliciclamida; Gliciclamide; Glycyclamidum; K-38; K-386; Tolcyclamide. I-Cyclohexyl-3-tosylurea; I-Cyclohexyl-3-p-tolylsulphonylurea.

Глицикламид  $C_{14}H_{20}N_2O_3S = 296.4.$ CAS - 664-95-9.



#### Profile

Glycyclamide is a sulfonylurea antidiabetic (p.460). It is given by mouth in the treatment of type 2 diabetes mellitus.

# Preparations

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

# Guar Gum

Cyamopsidis seminis pulvis; E412; Goma guar; Guar; Guar Flour; Guar Galactomannan; Guar, galactomannane du; Guar galactomannanum; Guar galaktomanan; Guar galaktomannan; Guaras; Guárbab galaktomannán; Guárbabmag-por; Guargalaktomannaani; Guargalaktomannan; Guaro galaktomananas; Jaguar Gum. CAS - 9000-30-0.

ATC Vet - QAIOBXOI.

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

Ph. Eur. 6.2 (Guar). Guar is obtained by grinding the endosperms of the seeds of Cyamopsis tetragonolobus. It consists mainly of guar galactomannan. Guar is a white or almost white powder, yielding a mucilage of variable viscosity when dissolved in water. Practically insoluble in alcohol.

Ph. Eur. 6.2 (Guar Galactomannan). A yellowish-white powder. It is soluble in cold and hot water; practically insoluble in organic solvents. Its main components are polysaccharides composed of D-galactose and D-mannose at molecular ratios of 1:1.4 to 1:2. The molecules consist of a linear main chain of  $\beta$ -(1 $\rightarrow$ 4)-glycosidically linked mannopyranoses and single  $\alpha$ -(1 $\rightarrow$ 6)-glycosidically linked galactopyranoses.

USNF 26 (Guar Gum). A gum obtained from the ground endosperms of Cyamopsis tetragonolobus (Leguminosae). It consists chiefly of a high-molecular-weight hydrocolloidal polysaccharide, a galactomannan, composed of galactan and mannan units combined through glycosidic linkages. It is a white to yellowish-white, practically odourless, powder. Dispersible in hot or cold water forming a colloidal solution.