

International Nonproprietary Names for Pharmaceutical Substances

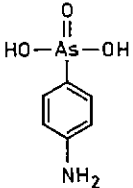
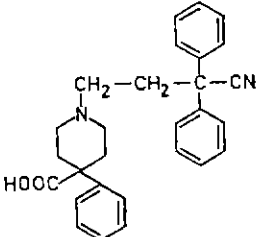
In accordance with article 3 of the Procedure for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Preparations,¹ notice is hereby given that the following names are under consideration by the World Health Organization as Proposed International Nonproprietary Names.

Comments on, or formal objections to, the

proposed names may be forwarded by any person to the Pharmaceuticals unit of the World Health Organization within four months of the date of their publication in the *WHO Chronicle*.

The inclusion of a name in the lists of proposed international nonproprietary names does not imply any recommendation for the use of the substance in medicine or pharmacy.

PROPOSED INTERNATIONAL NONPROPRIETARY NAMES (*Prop. I.N.N.*): LIST 23²

<i>Proposed International Nonproprietary Name (Latin, English)</i>	<i>Chemical Name or Description, Molecular and Graphic Formulae</i>
acidum arsanilicum arsanilic acid ¹	<i>p</i> -aminobenzearsonic acid $C_6H_4AsNO_3$ 
acidum difenoxilicum difenoxilic acid	1-(3-cyano-3,3-diphenylpropyl)-4-phenylisonipecotic acid $C_{22}H_{24}N_2O_2$ 

¹ See Annex, p. 22.

² Other lists of proposed international nonproprietary names can be found in *Chron. Wild Hlth Org.*, 1953, 7, 299; 1954, 8, 216, 313; 1956, 10, 28; 1957, 11, 231; 1958, 12, 102; *WHO Chronicle*, 1959, 13, 105, 152; 1960, 14, 168, 244; 1961, 15, 314; 1962, 16, 385; 1963, 17, 389; 1964, 18, 433; 1965, 19, 446; 1966, 20, 216; 1967, 21, 70, 478; 1968, 22, 112, 407; 1969, 23, 184, 418.

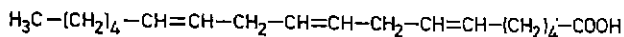
Lists of recommended international nonproprietary names were published in *Chron. Wild Hlth Org.*, 1955, 9, 185; *WHO Chronicle*, 1959, 13, 106, 463; 1962, 16, 101; 1965, 19, 165, 206, 249; 1966, 20, 421; 1967, 21, 538, 1968, 22, 463; 1969, 23, 490.

Proposed International
Nonproprietary Name
(Latin, English)

Chemical Name or Description,
Molecular and Graphic Formulae

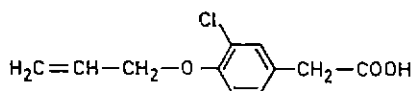
acidum gamolenicum
gamolenic acid

(7,7,Z)-6,9,12-octadecatrienoic acid
 $C_{18}H_{30}O_2$



aliclofenacum
aliclofenac

[4-(allyloxy)-3-chlorophenyl]acetic acid
 $C_{11}H_{11}ClO_3$

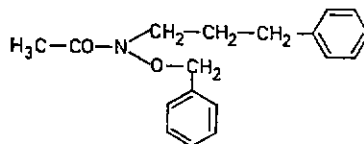


ancrodonum
ancrod

an active principle obtained from the venom of the Malayan pit-viper
Agkistrodon rhodostoma, acting specifically on fibrinogen

beloxamidum
beloxamide

N-(benzyloxy)-*N*-(3-phenylpropyl)acetamide
 $C_{18}H_{21}NO_2$



binramycinum
binramycin

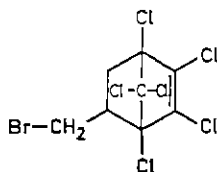
an antibiotic obtained from cultures of *Streptomyces bikiniensis*
variant, or the same substance produced by any other means

bleomycinum
bleomycin

an antibiotic obtained from cultures of *Streptomyces verticillus*, or the
same substance produced by any other means

bromociclenum
bromociclen

5-(bromomethyl)-1,2,3,4,7,7-hexachloro-2-norbornene
 $C_7H_5BrCl_6$

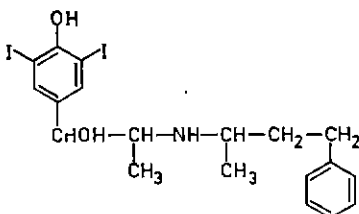


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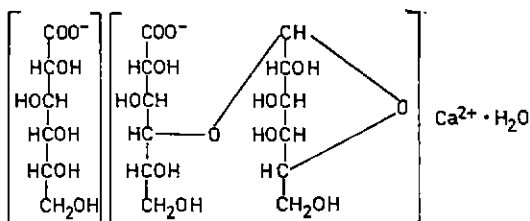
bufeniodum
bufeniodol

4-hydroxy-3,5-diiodo- α -[1-[(1-methyl-3-phenylpropyl)amino]ethyl]
benzyl alcohol
 $C_{19}H_{23}I_2NO_2$



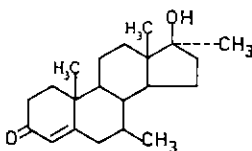
calcii glubionas
calcium glubionate

(γ -gluconato) (lactobionato)calcium monohydrate
 $(C_{12}H_{21}O_{12} \cdot C_6H_{11}O_7)Ca \cdot H_2O$



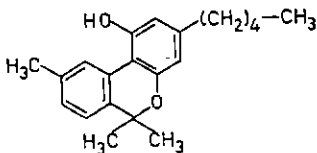
calusteronum
calusterone

17 β -hydroxy-7 β ,17-dimethylandroster-4-en-3-one
 $C_{21}H_{32}O_2$



cannabinolum
cannabinol

6,6,9-trimethyl-3-pentyl-6H-dibenzo[b,d]pyran-1-ol
 $C_{21}H_{28}O_2$

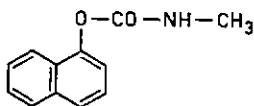


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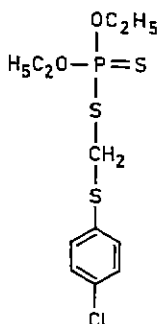
carbarilum
carbaril

1-naphthyl methylcarbamate
 $C_{12}H_{11}NO_2$



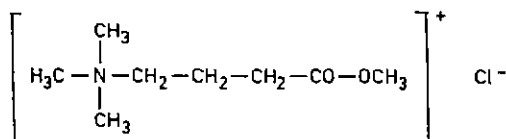
carbofenotionum
carbofenotion

S-[[(*p*-chlorophenyl)thio]methyl] *O,O*-diethyl phosphorodithioate
 $C_{11}H_{14}ClO_2PS_3$



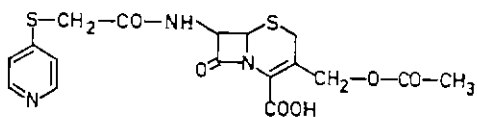
carpronii chloridum
carpronium chloride

(3-carboxypropyl)trimethylammonium chloride, methyl ester
 $C_7H_{16}ClNO_2$



cefapirinum
cefapirin

3-(hydroxymethyl)-8-oxo-7-[2-(4-pyridylthio)acetamido]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid acetate (ester)
 $C_{17}H_{17}N_3O_6S_2$

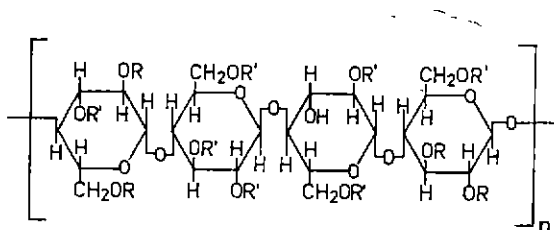


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cellaburatum
cellaburate

cellulose acetate butyrate

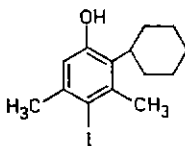


R = CH₃-CO-

R' = CH₃-CH₂-CH₂-CO-

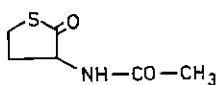
cicliomenolum
cicliomenol

2-cyclohexyl-4-iodo-3,5-xyleneol
C₁₄H₁₉IO



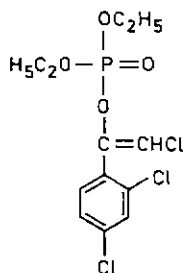
citiolonum
citiolone

N-(tetrahydro-2-oxo-3-thienyl)acetamide
C₄H₇NO₂S



clofenvinfosum
clofenvinfos

2-chloro-1-(2,4-dichlorophenyl)vinyl diethyl phosphate
C₁₂H₁₄Cl₃O₄P

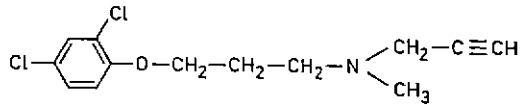


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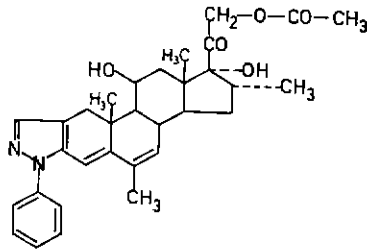
clorgilinum
clorgiline

N-[3-(2,4-dichlorophenoxy)propyl]-*N*-methyl-2-propynylamine
 $C_{13}H_{15}Cl_2NO$



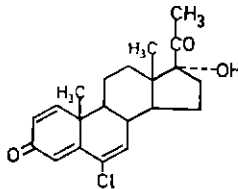
cortivazolium
cortivazol

11 β ,17,21-trihydroxy-6,16 α -dimethyl-2'-phenyl-2'-*H*-pregna-2,4,6-trieno-
[3,2-*c*]pyrazol-20-one 21-acetate
 $C_{32}H_{44}N_2O_5$



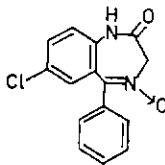
delmadinonum
delmadinone

6-chloro-17-hydroxypregna-1,4,6-triene-3,20-dione
 $C_{21}H_{25}ClO_3$



demoxepamum
demoxepam

7-chloro-1,3-dihydro-5-phenyl-2*H*-1,4-benzodiazepin-2-one 4-oxide
 $C_{15}H_{11}ClN_2O_2$

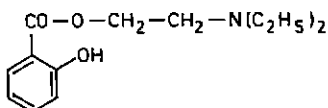


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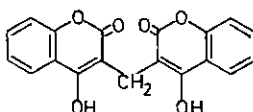
detanosalum
detanosal

2-(diethylamino)ethyl salicylate
 $C_{13}H_{19}NO_3$



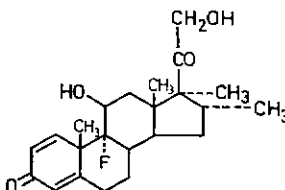
dicoumarolum
dicoumarol

3,3'-methylenebis(4-hydroxycoumarin)
 $C_{15}H_{12}O_6$



dimesonum
dimesone

9 α -fluoro-11 β ,21-dihydroxy-16 α ,17-dimethylpregna-1,4-diene-3,20-dione
 $C_{23}H_{31}FO_4$



dimeticonum 20
dimeticone 20

a polydimethylsiloxane of a viscosity of 17.0 to 23.0 centistokes

dimeticonum 200
dimeticone 200

a polydimethylsiloxane of a viscosity of 190 to 210 centistokes

dimeticonum 350
dimeticone 350

a polydimethylsiloxane of a viscosity of 330 to 370 centistokes

dimeticonum 500
dimeticone 500

a polydimethylsiloxane of a viscosity of 475 to 525 centistokes

dimeticonum 1000
dimeticone 1000

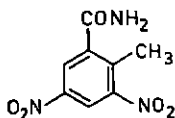
a polydimethylsiloxane of a viscosity of 950 to 1050 centistokes

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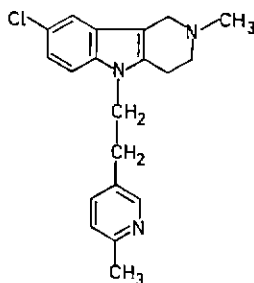
dinitolmidum
dinitolmide

3,5-dinitro-*o*-toluamide
 $C_8H_7N_3O_5$



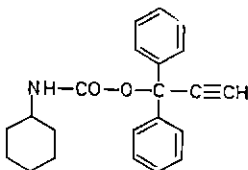
dorastinum
dorastine

8-chloro-2,3,4,5-tetrahydro-2-methyl-5-[2-(6-methyl-3-pyridyl)ethyl]-
1*H*-pyrido[4,3-*b*]indole
 $C_{20}H_{22}ClN_5$



enpromatum
enpromate

1,1-diphenyl-2-propynyl cyclohexanecarbamate
 $C_{22}H_{23}NO_2$

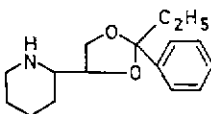


enramycinum
enramycin

enduracidin; an antibiotic obtained from cultures of *Streptomyces fungicidicus* No. B 5477, or the same substance produced by any other means

etoxadrolum
etoxadrol

(+)-2-(2-ethyl-2-phenyl-1,3-dioxolan-4-yl)peridine
 $C_{16}H_{23}NO_2$

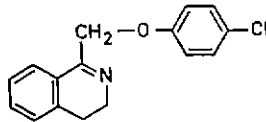


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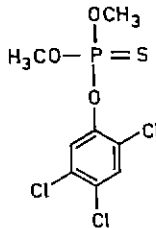
famotinum
famotine

1-[(*p*-chlorophenoxy)methyl]-3,4-dihydroisoquinoline
 $C_{16}H_{14}ClNO$



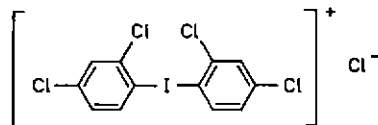
fenclofosum
fenclofos

O,O-dimethyl *O*-(2,4,5-trichlorophenyl)phosphorothioate
 $C_6H_3Cl_3O_3PS$



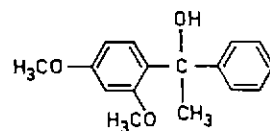
feniodii chloridum
feniodium chloride

bis(2,4-dichlorophenyl)iodonium chloride
 $C_{12}H_8Cl_4I$



fenocinolum
fenocinol

2,4-dimethoxy- α -methylbenzhydrol
 $C_{16}H_{16}O_3$

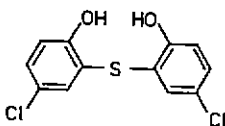


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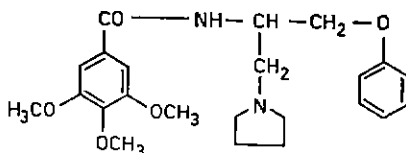
fenticlorum
fenticlor

2,2'-thiobis(4-chlorophenol)
 $C_{12}H_{10}Cl_2O_2S$



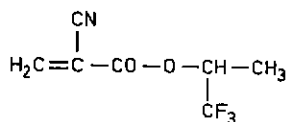
fepromidum
fepromide

3,4,5-trimethoxy-N-[1-(phenoxyethyl)-2-(1-pyrrolidinyl)ethyl]
benzamide
 $C_{23}H_{30}N_2O_5$



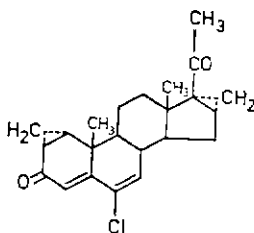
flucrilatum
flucrilate

2,2,2-trifluoro-1-methylethyl 2-cyanoacrylate
 $C_7H_6F_3NO_2$



gestaclonum
gestaclone

17 β -acetyl-6-chloro-1 β ,1 α ,2 β ,8 β ,9 α ,10,11,12,13,14 α ,15,16 β ,16 α ,17-tetra-
decahydro-10 β ,13 β -dimethyl-3H-dicyclopropa[1,2:16,17]cyclopenta[a]-
phenanthren-3-one
 $C_{23}H_{27}ClO_2$

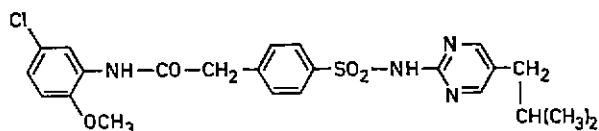


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glidanilum
glidanile

5'-chloro-2-[*p*-[(5-isobutyl-2-pyrimidinyl)sulfamoyl]phenyl]-*o*-
acetanisidide
 $C_{23}H_{25}ClN_4O_4S$



hachimycinum
hachimycin

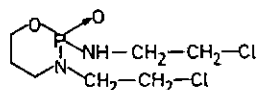
an antibiotic obtained from cultures of *Streptomyces hachijoensis*, or
the same substance produced by any other means

hydrotalcitum
hydrotalcite

aluminum magnesium hydroxide carbonate hydrate
 $Mg_6Al_2(OH)_{16}CO_3 \cdot 4H_2O$

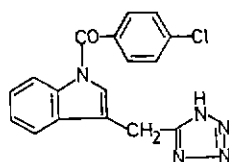
ifosfamidum
ifosfamide

3-(2-chloroethyl)-2-[(2-chloroethyl)amino]tetrahydro-2*H*-1,3,2-
oxazaphosphorin 2-oxide
 $C_7H_{15}Cl_2N_2O_2P$



intrazolum
intrazole

1-(*p*-chlorobenzoyl)-3-(1*H*-tetrazol-5-ylmethyl)indole
 $C_{17}H_{12}ClN_5O$



josamycinum
josamycin

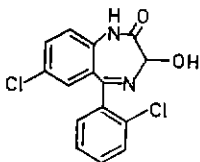
a macrolide antibiotic obtained from cultures of *Streptomyces narbo-*
nensis var. *josamyceticus* var. *nova*, or the same substance produced
by any other means

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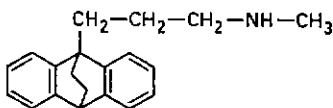
lorazepamum
lorazepam

7-chloro-5-(*o*-chlorophenyl)-1,3-dihydro-3-hydroxy-2*H*-1,4-benzodiazepin-2-one
 $C_{15}H_{10}Cl_2N_2O_2$



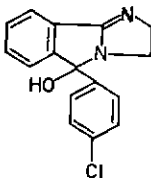
maprotilinum
maprotiline

N-methyl-9,10-ethanoanthracene-9(10*H*)-propylamine
 $C_{20}H_{23}N$



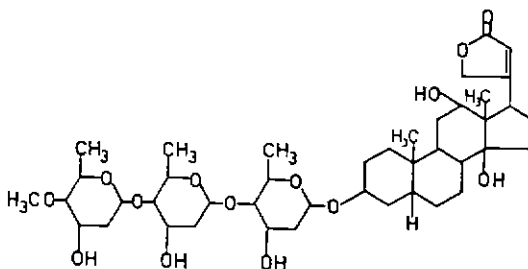
mazindolum
mazindol

5-(*p*-chlorophenyl)-2,5-dihydro-3*H*-imidazo[2,1-*a*]isoindol-5-ol
 $C_{14}H_{13}ClN_2O$



medigoxinum
medigoxin

4'''-*O*-methylidigoxin
 $C_{42}H_{66}O_{14}$

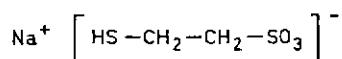


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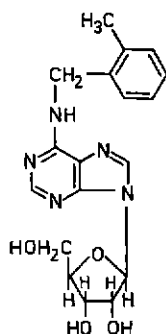
mesna
mesna

sodium 2-mercaptoethanesulfonate
 $C_2H_5NaO_3S_2$



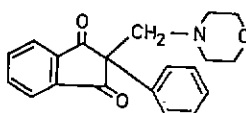
metrifudilum
metrifudil

6-(*o*-methylbenzylamino)-9- β -D-ribofuranosyl-9*H*-purine
 $C_{18}H_{21}N_5O_4$



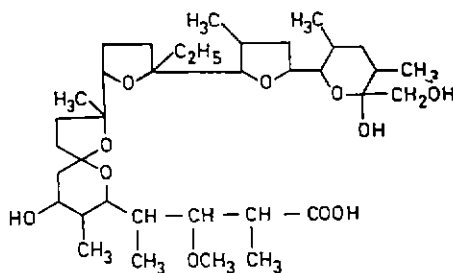
mofedionum
mofedione

2-(morpholinomethyl)-2-phenyl-1,3-indanedione
 $C_{20}H_{19}NO_3$



monensinum
monensin

2-[5-ethyltetrahydro-5-[tetrahydro-3-methyl-5-[tetrahydro-6-hydroxy-6-(hydroxymethyl)-3,5-dimethylpyran-2-yl]-2-furyl]-2-furyl]-9-hydroxy- β -methoxy- $\alpha,\gamma,2,8$ -tetramethyl-1,6-dioxaspiro[4,5]decane-7-butyrac acid
 $C_{58}H_{92}O_{11}$

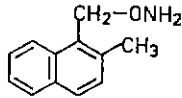


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

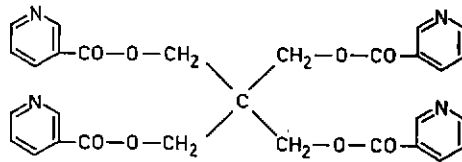
nafominum
nafomine

O-[(2-methyl-1-naphthyl)methyl]hydroxylamine
 $C_{12}H_{13}NO$



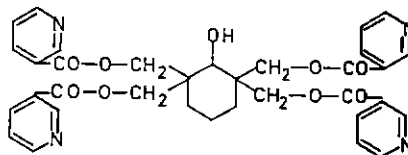
niceritrolum
niceritrol

pentaerythritol tetranicotinate
 $C_{25}H_{24}N_4O_8$



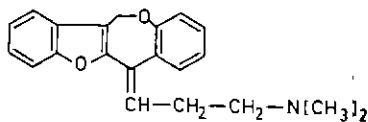
nicomolum
nicomol

2-hydroxy-1,1,3,3-cyclohexanetetramethanol 1,1,3,3-tetranicotinate
 $C_{24}H_{32}N_4O_8$



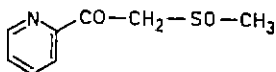
oxetoronum
oxetorone

N,N-dimethylbenzofuro[3,2-c][1]benzoxepin-4⁶-(12*H*)- γ -propylamine
 $C_{21}H_{21}NO_2$



oxisuranum
oxisuran

(methylsulfinyl)methyl 2-pyridyl ketone
 $C_8H_9NO_2S$

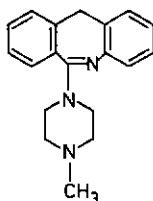


*Proposed International
Nonproprietary Name
(Latin, English)*

perlapinum
perlapine

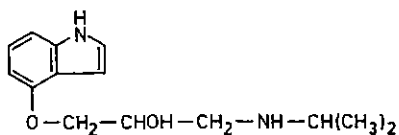
*Chemical Name or Description,
Molecular and Graphic Formulae*

6-(4-methyl-1-piperazinyl)morphanthridine
 $C_{19}H_{21}N_3$



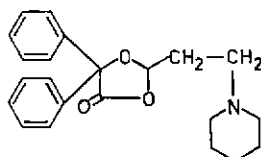
pindololum
pindolol

1-(indol-4-yloxy)-3-(isopropylamino)-2-propanol
 $C_{14}H_{20}N_2O_2$



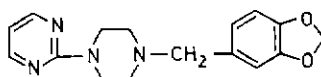
pipoxolanum
pipoxolan

5,5-diphenyl-2-(2-piperidinoethyl)-1,3-dioxolan-4-one
 $C_{22}H_{25}NO_3$



piribedilum
piribedil

2-(4-piperonyl-1-piperazinyl)pyrimidine
 $C_{18}H_{18}N_4O_2$

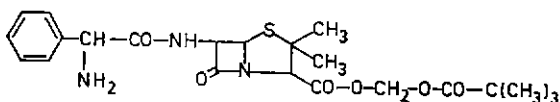


*Proposed International
Nomenclature Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

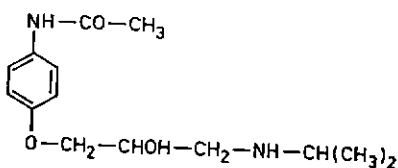
pivampicillinum
pivampicillin

D-6-(2-amino-2-phenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid hydroxymethyl ester, pivalate (ester)
 $C_{22}H_{29}N_3O_6S$



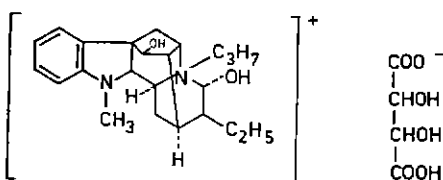
practololum
practolol

4'-[2-hydroxy-3-(isopropylamino)propoxy]acetanilide
 $C_{14}H_{22}N_2O_3$



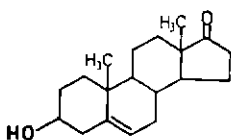
prajmalii bitartras
prajmalium bitartrate

N-propylajmalinium tartrate
 $C_{27}H_{34}N_2O_4$



prasteronum
prasterone

3 β -hydroxyandrost-5-en-17-one
 $C_{19}H_{28}O_2$

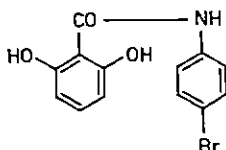


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

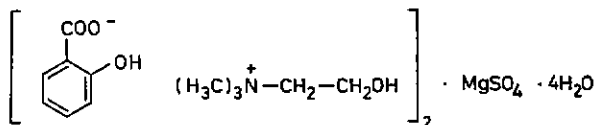
resorantelum
resorantel

4'-bromo- γ -resorcylanilide
 $C_{13}H_{10}BrNO_3$



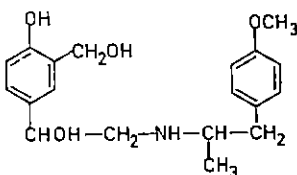
salcolexum
salcolex

choline salicylate compound with magnesium sulfate
(2:1) tetrahydrate
 $[C_{12}H_{19}NO_4]_2 \cdot MgSO_4 \cdot 4H_2O$



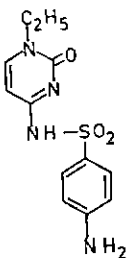
salmefamolum
salmefamol

α -[(*p*-methoxy- α -methylphenethylamino)methyl]-4-hydroxy-*m*-xylene- α, α' -diol
 $C_{19}H_{25}NO_4$



sulfacitinum
sulfacitine

N'-(1-ethyl-1,2-dihydro-2-oxo-4-pyrimidinyl)sulfanilamide
 $C_{12}H_{14}N_4O_3S$

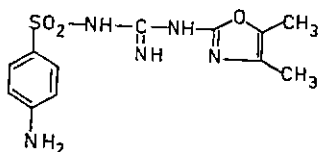


*Proposed International
Nonproprietary Name
(Latin, English)*

sulfaguanolum
sulfaguanole

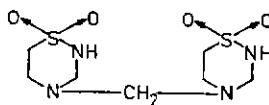
*Chemical Name or Description,
Molecular and Graphic Formulae*

*N*¹-[(4,5-dimethyl-2-oxazolyl)amido]sulfanilamide
C₁₂H₁₅N₅O₃S



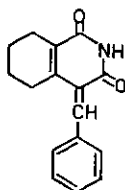
taurolinum
taurolin

4,4'-methylenebis(tetrahydro-1,2,4-thiadiazine 1,1-dioxide)
C₇H₁₆N₄O₄S₂



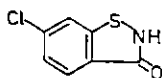
tesimidum
tesimide

4-benzylidene-5,6,7,8-tetrahydro-1,3(2*H*,4*H*)-isoquinolinedione
C₁₆H₁₅NO₂



ticlatonum
ticlatone

6-chloro-1,2-benzisothiazolin-3-one
C₇H₅ClNOS

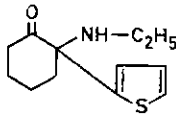


*Proposed International
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*Chemical Name or Description,
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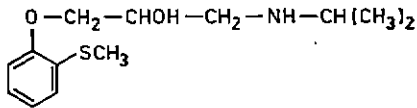
tiletaminum
tiletamine

2-(ethylamino)-2-(2-thienyl)cyclohexanone
 $C_{12}H_{17}NOS$



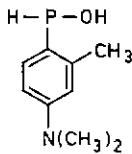
tiprenololum
tiprenolol

1-(isopropylamino)-3-[o-(methylthio)phenoxy]-2-propanol
 $C_{13}H_{21}NO_2S$



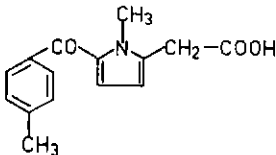
toldimfosum
toldimfos

4-(dimethylamino)-o-tolylphosphinous acid
 $C_8H_{11}NOP$



tolmetinum
tolmetin

1-methyl-5-*p*-toluoylpyrrole-2-acetic acid
 $C_{15}H_{15}NO_3$

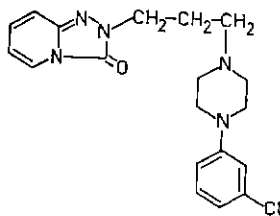


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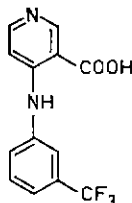
trazodonum
trazodone

2-[3-[4-(*m*-chlorophenyl)-1-piperaziny]propyl]-*s*-triazolo[4,3-*a*]-
pyridin-3(2*H*)-one
 $C_{19}H_{22}ClN_5O$



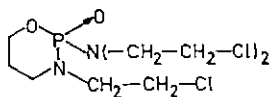
triflocinum
triflocin

4-(α,α,α -trifluoro-*m*-toluidino)nicotinic acid
 $C_{13}H_9F_3N_2O_2$



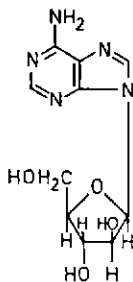
trofosamidum
trofosamide

3-(2-chloroethyl)-2-[bis(2-chloroethyl)amino]tetrahydro-2*H*-1,3,2-
oxazaphosphorin 2-oxide
 $C_9H_{14}Cl_3N_2O_2P$



vidarabinum
vidarabine

9- β -D-arabinofuranosyladenine
 $C_{10}H_{13}N_5O_4$

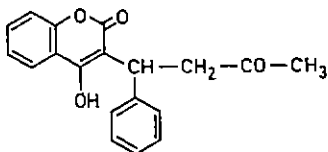


Proposed International
Nonproprietary Name
(Latin, English)

Chemical Name or Description,
Molecular and Graphic Formulae

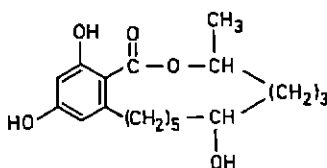
warfarinum
warfarin

3-(α -acetylbenzyl)-4-hydroxycoumarin
 $C_{19}H_{16}O_4$



zeranolum
zeranol

3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-1*H*-2-benzoxacyclotetradecin-1-one
 $C_{17}H_{24}O_3$



AMENDMENTS TO PREVIOUS LISTS

Vol. 23, No. 9

PROPOSED INTERNATIONAL NONPROPRIETARY NAMES (*Prop. I.N.N.*): LIST 22

p. 421: *delete*

alufibratum
alufibrate

bis[2-(*p*-chlorophenoxy)-2-methylpropionato]hydroxyaluminium
 $C_{27}H_{22}AlCl_2O_7$

INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL PREPARATIONS

CUMULATIVE LIST No. 2, 1967

p. 33:	<i>delete</i>	<i>insert</i>
	diaphenylsulfonum	dapsonum
	diaphenylsulfone	dapsone
p. 34:	<i>delete</i>	<i>insert</i>
	dietroxinum	diethadionum
	dietroxine	diethadione
p. 75:	<i>delete</i>	<i>insert</i>
	phenododecinii bromidum	domipheni bromidum
	phenododecinium bromide	domiphen bromide

Annex

PROCEDURE FOR THE SELECTION OF RECOMMENDED INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL SUBSTANCES *

The following procedure shall be followed by the World Health Organization in the selection of recommended international nonproprietary names for pharmaceutical preparations, in accordance with the World Health Assembly resolution WHA3.11:

1. Proposals for recommended international nonproprietary names shall be submitted to the World Health Organization on the form provided therefor.
2. Such proposals shall be submitted by the Director-General of the World Health Organization to the members of the Expert Advisory Panel on the International Pharmacopoeia and Pharmaceutical Preparations designated for this purpose, for consideration in accordance with the "General principles for guidance in devising International Nonproprietary Names", appended to this procedure. The name used by the person discovering or first developing and marketing a pharmaceutical preparation shall be accepted, unless there are compelling reasons to the contrary.
3. Subsequent to the examination provided for in article 2, the Director-General of the World Health Organization shall give notice that a proposed international nonproprietary name is being considered.
 - A. Such notice shall be given by publication in the *Chronicle of the World Health Organization*¹ and by letter to Member States and to national pharmacopoeia commissions or other bodies designated by Member States.
 - (i) Notice may also be sent to specific persons known to be concerned with a name under consideration.
 - B. Such notice shall:
 - (i) set forth the name under consideration;
 - (ii) identify the person who submitted a proposal for naming the substance, if so requested by such person;
 - (iii) identify the substance for which a name is being considered;
 - (iv) set forth the time within which comments and objections will be received and the person and place to whom they should be directed;
 - (v) state the authority under which the World Health Organization is acting and refer to these rules of procedure.
 - C. In forwarding the notice, the Director-General of the World Health Organization shall request that Member States take such steps as are necessary to prevent the acquisition of proprietary rights in the proposed name during the period it is under consideration by the World Health Organization.
4. Comments on the proposed name may be forwarded by any person to the World Health Organization within four months of the date of publication, under article 3, of the name in the *Chronicle of the World Health Organization*.
5. A formal objection to a proposed name may be filed by any interested person within four months of the date of publication, under article 3, of the name in the *Chronicle of the World Health Organization*.
 - A. Such objection shall:
 - (i) identify the person objecting;
 - (ii) state his interest in the name;
 - (iii) set forth the reasons for his objection to the name proposed.
6. Where there is a formal objection under article 5, the World Health Organization may either reconsider the proposed name or use its good offices to attempt to obtain withdrawal of the objection. Without pre-

* Text adopted by the Executive Board of WHO in resolution EB15 R7 (*Off. Rec. Wld Hlth Org.*, 1955, 60, 3) and amended by the Board in resolution EB43 R9 (*Off. Rec. Wld Hlth Org.*, 1967, 173, 10).

¹ The title of this publication was changed to *WHO Chronicle* in January 1959.

judice to the consideration by the World Health Organization of a substitute name or names, a name shall not be selected by the World Health Organization as a recommended international nonproprietary name while there exists a formal objection thereto filed under article 5 which has not been withdrawn.

7. Where no objection has been filed under article 5, or all objections previously filed have been withdrawn, the Director-General of the World Health Organization shall give notice in accordance with subsection A of article 3 that the name has been selected by the World Health Organization as a recommended international nonproprietary name.

8. In forwarding a recommended international nonproprietary name to Member States under article 7, the Director-General of the World Health Organization shall:

A. request that it be recognized as the nonproprietary name for the substance; and

B. request that Member States take such steps as are necessary to prevent the acquisition of proprietary rights in the name, including prohibiting registration of the name as a trade-mark or trade-name.

GENERAL PRINCIPLES FOR GUIDANCE IN DEVISING INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL SUBSTANCES *

1. Names should be distinctive in sound and spelling. They should not be inconveniently long and should not be liable to confusion with names already in common use.

2. The name for a substance belonging to a group of pharmacologically related substances should, where appropriate, show this relationship. Names that are likely to convey to a patient an anatomical, physiological, pathological or therapeutic suggestion should be avoided.

The above primary principles are to be implemented by utilization of the following secondary principles.

3. In devising the name of the first substance in a new pharmacological group (the parent substance), consideration should be given to the possibility of devising suitable names for related substances belonging to the new group.

4. Syllables such as "methylhydro", "methoxy" and "chlor" should preferably be abbreviated (to "medro", "meto", "clo", etc.).

5. In the naming of substances which are acids, existing names generally used in chemistry which include the word "acidum" ("acid") should be used, if the name is adequate for practical use in therapy and pharmacy. In other circumstances, the substance should be named by a single word and not by a name which includes the word "acid". Where the word "acid" is not used in the name, as is customary in the penicillin series, a salt should preferably be named without modification of the parent acid name, e.g., "oxacillin" and "oxacillin sodium".

6. Names for substances which are used as salts should in general apply to the active base (or the active acid). Names for different salts or esters of the same active substance should differ only in respect of the name of the inactive acid (or the inactive base). Exceptions may have to be made for those cases in which pharmacological activity may reside in both parts of the salt or ester.

For quaternary ammonium substances, the cation and anion should be named appropriately as separate components of a quaternary substance and not in the amine-salt style.

7. The use of an isolated letter or number should be avoided; hyphenated construction is also undesirable.

8. To facilitate translation and pronunciation "f" should preferably be used instead of "ph", "t" instead of "th", "e" instead of "ae" or "oe", and "i" instead of "y".

9. Provided that the names suggested are in accordance with these principles, names proposed by the person discovering or first developing and marketing a pharmaceutical preparation, or names already officially in use in any country, should receive preferential consideration.

10. Group relationship in names (see item 2) should preferably be shown by using common syllables in the following list. Where a syllable or a group of syllables is shown without any hyphens it may be used

* Text revised by the Expert Committee on Nonproprietary Names for Pharmaceutical Preparations (unpublished reports WHO/Pharm/67.443 and WHO/Pharm/68.447).

anywhere in the name. The syllable, or group of syllables, should, if possible, be used only for such substances.

Subsidiary group relationships should be shown by devising names which show similarities to and are analogous with a previously named substance, the parent substance.

At the end of the list are general chemical syllables. Should they come into conflict with other suggested syllables, the suffix conveying the best information should be used.

<i>Latin</i>	<i>English</i>	<i>French</i>	
-andr-	-andr-	-andr-	} steroids, androgenic
or -stan-	or -stan-	or -stan-	
or -ster-	or -ster-	or -ster-	
-apol-	-apol-	-apol-	polysulfonic anticoagulants
-arolum	-arol	-arol	anticoagulants
-bamatum	-bamate	-bamate	tranquillizers of the propanediol and pentanediol series
barb	barb	barb	barbituric acids, hypnotic activity
bol	bol	bol	anabolic steroids
-cainum	-caine	-caïne	local anaesthetics
cef-	cef-	cef-	antibiotics with cephalosporanic acid nucleus
-cillinum	-cillin	-cilline	penicillins: derivatives of carboxy-6-amino-penicillanic acid
-cort-	-cort-	-cort-	steroids, glucocorticoids and mineralocorticoids, other than prednisolone derivatives
-crinum	-crine	-crine	acridine derivatives
-curonium	-curonium	-curonium	curare-like drugs
-cyclinum	-cycline	-cycline	antibiotics, tetracycline derivatives
-dionum	-dione	-dione	antiepileptics derived from oxazolidinedione
-estr-	-estr-	-estr-	estrogenic drugs
-gest-	-gest-	-gest-	steroids, progestative
gli-	gli-	gli-	sulfonamide oral antidiabetics
io-	io-	io-	iodine-containing contrast media
-mer-	-mer-	-mer-	mercury-containing drugs, antimicrobial or diuretic
mito-	mito-	mito-	nucleotoxic, antineoplastic agents
-moxinum	-moxin	-moxine	monoamine oxidase inhibitors
-mycinum	-mycin	-mycine	antimicrobial antibiotics, produced by <i>Streptomyces</i> strains
nifur-	nifur-	nifur-	5-nitrofur derivatives
-orexum	-orex	-orex	anorexigenic agents
-praminum	-pramine	-pramine	dibenzazepine, compounds of the imipramine type
-quinum	-quine	-quine	quinoline derivatives
-serpinum	-serpine	-serpine	derivatives of <i>Rauwolfia</i> alkaloids
-stigminum	-stigmine	-stigmine	anticholinesterases
sulfa-	sulfa-	sulfa-	sulfonamides, used as antimicrobials
-tizidum	-tizide	-tizide	diuretics which are thiazide derivatives
-toinum	-toin	-toïne	antiepileptics which are hydantoin derivatives
-verinum	-verine	-vérine	spasmolytics with a papaverine-like action
-inum	-ine	-ine	alkaloids and organic bases
-onum	-one	-one	ketones
-ium	-ium	-ium	quaternary amines