Supplement to *WHO Chronicle*, 1975, Vol. 29, No. 9

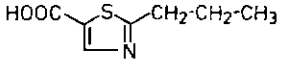
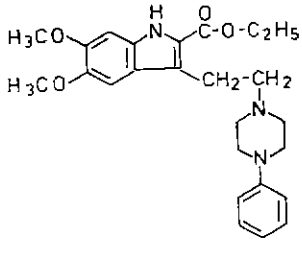
# International Nonproprietary Names for Pharmaceutical Substances

In accordance with article 3 of the Procedure for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Substances,[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. INN): List 34[2]

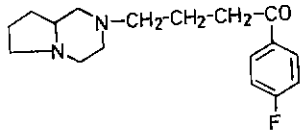
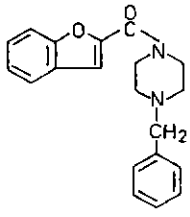
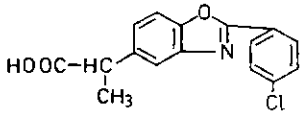
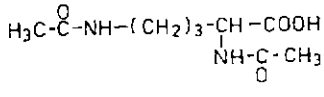
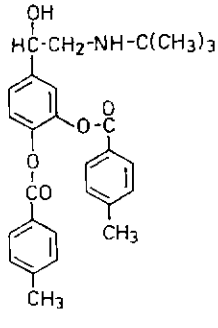
| *Proposed International Nonproprietary Name* (Latin, English) | *Chemical Name or Description, Molecular and Graphic Formulae* |
|---|---|
| acidum tizoprolicum<br>tizoprolic acid | 2-propyl-5-thiazolecarboxylic acid<br>$C_7H_9NO_2S$<br>  |
| actaplaninum<br>actaplanin | glycopeptide antibiotic obtained from cultures of *Actinoplanes* strain ATCC 23342, or the same substance produced by any other means |
| alpertinum<br>alpertine | ethyl 5,6-dimethoxy-3-[2-(4-phenyl-1-piperazinyl)ethyl]indole-2-carboxylate<br>$C_{25}H_{31}N_3O_4$<br>  |

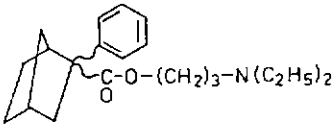
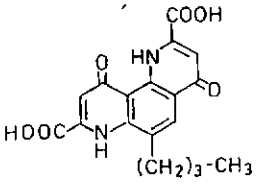
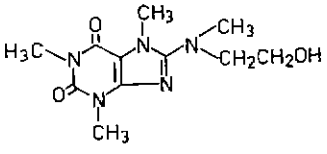
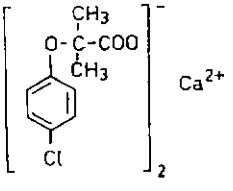
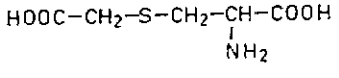
[1] See Annex, p. 20.

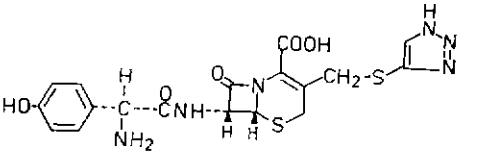
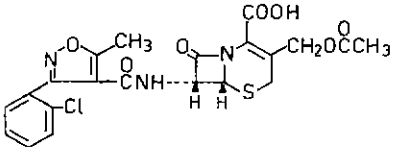
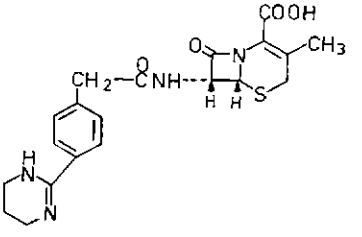
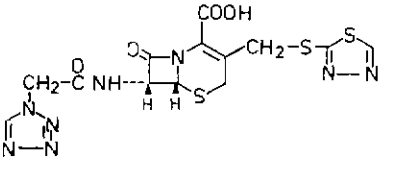
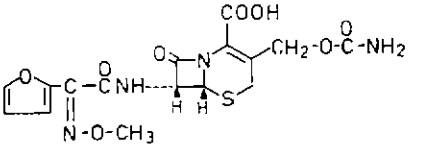
[2] Other lists of proposed international nonproprietary names can be found in *Chron. Wld Hlth Org.*, 1953, **7**, 299; 1954, **8**, 216, 313; 1956, **10**, 28; 1957, **11**, 231; 1958, **12**, 102; *WHO Chronicle*, 1959, **13**, 105, 152; 1960, **14**, 168, 244; 1961, **15**, 314; 1962, **16**, 385, 1963, **17**, 389; 1964, **18**, 433; 1965, **19**, 446, 1966, **20**, 216; 1967, **21**, 70, 478; 1968, **22**, 112, 407; 1969, **23**, 183, 418; 1970, **24**, 119, 413; 1971, **25**, 123, 415; 1972, **26**, 121, 414; 1973, **27**, 120, 330; 1974, **28**, 133; supplements to *WHO Chronicle*, 1974, Vol. 28, No. 9; 1975, Vol. 29, No. 3.

Lists of recommended international nonproprietary names were published in *Chron Wld 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; 1970, **24**, 526; 1971, **25**, 476; 1972, **26**, 476; 1973, **27**, 453; supplement to *WHO Chronicle*, 1974, Vol. 28, No. 10.

All names from lists 1–25 of proposed international nonproprietary names, together with a molecular formula index, will be found in: World Health Organization (1971) *International nonproprietary names for pharmaceutical substances: Cumulative list No. 3, 1971*, Geneva, 189 pages (price: Sw. fr. 24.—). This publication may be obtained from the sales agents listed on the back cover of the *WHO Chronicle* or from: World Health Organization, Distribution and Sales Service, 1211 Geneva 27, Switzerland.

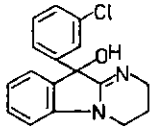
| *Proposed International Nonproprietary Name* (Latin, English) | *Chemical Name or Description, Molecular and Graphic Formulae* |
|---|---|
| azabuperonum<br>azabuperone | 4′-fluoro-4-(hexahydropyrrolo[1,2-*a*]pyrazin-2(1*H*)-yl)butyrophenone<br>$C_{17}H_{23}FN_2O$<br>  |
| beturalinum<br>beturaline | 1-(2-benzofuranylcarbonyl)-4-benzylpiperazine<br>$C_{20}H_{20}N_2O_2$<br>  |
| benoxaprofenum<br>benoxaprofen | 2-(*p*-chlorophenyl)-α-methyl-5-benzoxazoleacetic acid<br>$C_{16}H_{12}ClNO_3$<br>  |
| bisorcicum<br>bisorcic | $N^2$,$N^5$-diacetyl-L-ornithine<br>$C_9H_{16}N_2O_4$<br>  |
| bitolterolum<br>bitolterol | 4-[2-(*tert*-butylamino)-1-hydroxyethyl]-*o*-phenylene di-*p*-toluate<br>$C_{28}H_{31}NO_5$<br>  |

| *Proposed International Nonproprietary Name* (Latin, English) | *Chemical Name or Description, Molecular and Graphic Formulae* |
|---|---|
| bornaprinum<br>bornaprine | 3-(diethylamino)propyl 2-phenyl-2-norbornanecarboxylate<br>$C_{21}H_{31}NO_2$<br>  |
| bufrolinum<br>bufrolin | 6-butyl-1,4,7,10-tetrahydro-4,10-dioxo-1,7-phenanthroline-2,8-dicarboxylic acid<br>$C_{18}H_{16}N_2O_6$<br>  |
| cafaminolum<br>cafaminol | 8-[(2-hydroxyethyl)methylamino]caffeine<br>$C_{11}H_{17}N_5O_3$<br>  |
| calcii clofibras<br>calcium clofibrate | calcium 2-(*p*-chlorophenoxy)-2-methylpropionate<br>$C_{20}H_{20}CaCl_2O_6$ *or* $(C_{10}H_{10}ClO_3)_2Ca$<br>  |
| carbocisteinum<br>carbocisteine | 3-[(carboxymethyl)thio]alanine<br>$C_5H_9NO_4S$<br>  |

| *Proposed International Nonproprietary Name* (Latin, English) | *Chemical Name or Description, Molecular and Graphic Formulae* |
|---|---|
| cefatrizinum<br>cefatrizine | (6*R*,7*R*)-7-[(*R*)-2-amino-2-(*p*-hydroxyphenyl)acetamido]-8-oxo-3-[(*v*-triazol-4-ylthio)methyl]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid<br>$C_{18}H_{18}N_6O_5S_2$<br>  |
| cefoxazolum<br>cefoxazole | (6*R*,7*R*)-7-[3-(*o*-chlorophenyl)-5-methyl-4-isoxazolecarboxamido]--3-(hydroxymethyl)-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid acetate (ester)<br>$C_{21}H_{18}ClN_3O_7S$<br>  |
| cefrotilum<br>cefrotil | (6*R*,7*R*)-3-methyl-8-oxo-7-[2-[*p*-(1,4,5,6-tetrahydro-2-pyrimidinyl)phenyl]-acetamido]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid<br>$C_{20}H_{22}N_4O_4S$<br>  |
| ceftezolum<br>ceftezole | (6*R*,7*R*)-8-oxo-7-[2-(1*H*-tetrazol-1-yl)acetamido]-3-[(1,3,4-thiadiazol-2-ylthio)methyl]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid<br>$C_{13}H_{12}N_8O_4S_3$<br>  |
| cefuroximum<br>cefuroxime | (6*R*,7*R*)-7-[2-(2-furyl)glyoxylamido]-3-(hydroxymethyl)-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid (*Z*)-mono(*O*-methyloxime) carbamate (ester)<br>$C_{16}H_{16}N_4O_8S$<br>  |

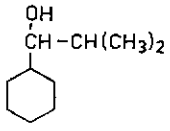
ciclazindolum
ciclazindol

10-(*m*-chlorophenyl)-2,3 4,10-tetrahydropyrimido[1,2-*a*]indol-10-ol
$C_{17}H_{15}ClN_2O$



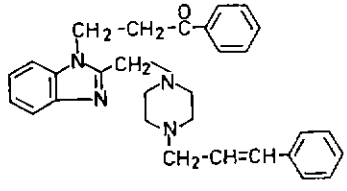
cimepanolum
cimepanol

α-isopropylcyclohexanemethanol
$C_{10}H_{20}O$



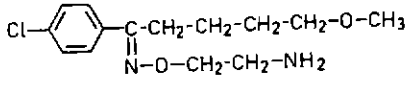
cinprazolum
cinprazole

3-[2-[(4-cinnamyl-1-piperazinyl)methyl]benzimidazol-1-yl]propiophenone
$C_{30}H_{32}N_4O$



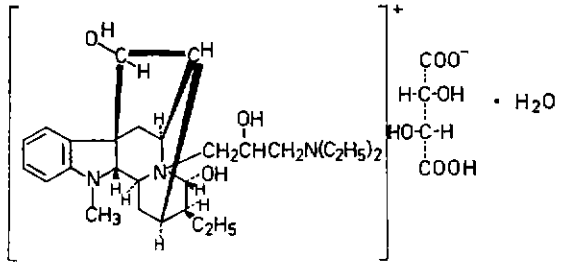
clovoxaminum
clovoxamine

4′-chloro-5-methoxyvalerophenone (*E*)-*O*-(2-aminoethyl)oxime
$C_{14}H_{21}ClN_2O_2$



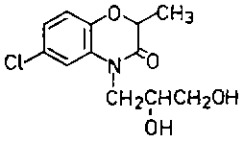
detajmii bitartras
detajmium bitartrate

4-[3-(diethylamino)-2-hydroxypropyl]ajmalinium hydrogen tartrate monohydrate
$C_{31}H_{47}N_3O_9 . H_2O$



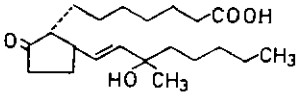
**diproxadolum**
**diproxadol**

6-chloro-4-(2,3-dihydroxypropyl)-2-methyl-2*H*-1,4-benzoxazin-3(4*H*)-one
$C_{12}H_{14}ClNO_4$



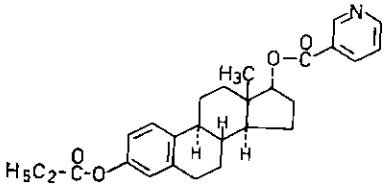
**doxaprostum**
**doxaprost**

(1*R**,2*R**)-2-[(*E*)-3-hydroxy-3-methyl-1-octenyl]-5-oxocyclopentaneheptanoic acid
$C_{21}H_{36}O_4$



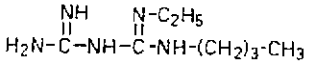
**estrapronicatum**
**estrapronicate**

estradiol 17-nicotinate 3-propionate
$C_{27}H_{31}NO_4$



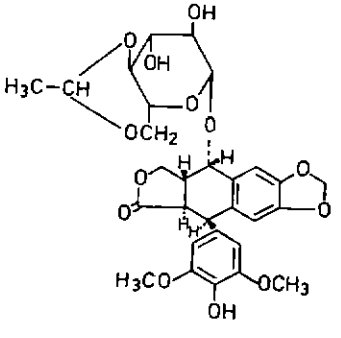
**etoforminum**
**etoformin**

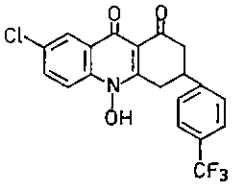
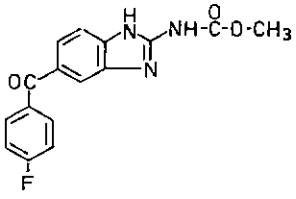
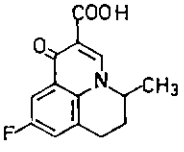
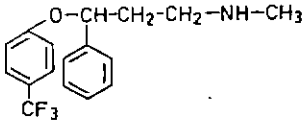
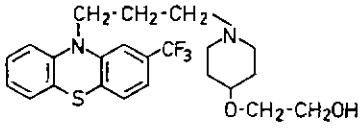
1-butyl-2-ethylbiguanide
$C_8H_{19}N_5$



**etoposidum**
**etoposide**

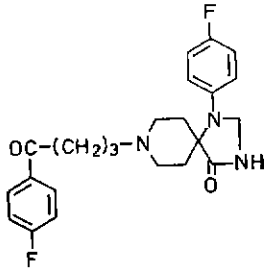
4′-demethylepipodophyllotoxin 9-(4,6-*O*-ethylidene-β-D-glucopyranoside)
$C_{29}H_{32}O_{13}$



| *Proposed International Nonproprietary Name* (Latin, English) | *Chemical Name or Description, Molecular and Graphic Formulae* |
|---|---|
| floxacrinum<br>floxacrine | 7-chloro-3,4-dihydro-10-hydroxy-3-(α,α,α-trifluoro-*p*-tolyl)-1,9(2*H*)-acridandione<br>$C_{20}H_{13}ClF_3NO_3$<br>  |
| fendazolum<br>fendazole | methyl 5-(*p*-fluorobenzoyl)-2-benzimidazolecarbamate<br>$C_{16}H_{12}FN_3O_3$<br>  |
| flumequinum<br>flumequine | 9-fluoro-6,7-dihydro-5-methyl-1-oxo-1*H*,5*H*-benzo[*ij*]quinolizine-2-carboxylic acid<br>$C_{14}H_{12}FNO_3$<br>  |
| fluoxetinum<br>fluoxetine | (±)-*N*-methyl-3-phenyl-3-[(α,α,α-trifluoro-*p*-tolyl)oxy]propylamine<br>$C_{17}H_{18}F_3NO$<br>  |
| flupimazinum<br>flupimazine | 2-[[1-[3-[2-(trifluoromethyl)phenothiazin-10-yl]propyl]-4-piperidyl]oxy]-ethanol<br>$C_{23}H_{27}F_3N_2O_2S$<br>  |

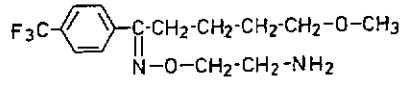
fluspiperonum
fluspiperone

8-[3-(*p*-fluorobenzoyl)propyl]-1-(*p*-fluorophenyl)-1,3,8-triazaspiro[4.5]-decan-4-one
$C_{23}H_{25}F_2N_3O_2$



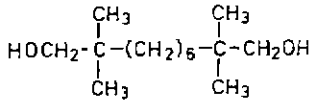
fluvoxaminum
fluvoxamine

5-methoxy-4′-(trifluoromethyl)valerophenone (*E*)-*O*-(2-aminoethyl)oxime
$C_{15}H_{21}F_3N_2O_2$



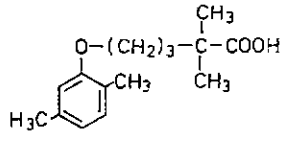
gemcadiolum
gemcadiol

2,2,9,9-tetramethyl-**1**,10-decanediol
$C_{14}H_{30}O_2$



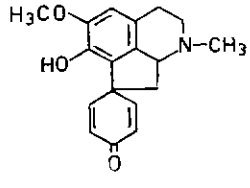
gemfibrozilum
gemfibrozil

2,2-dimethyl-5-(2,5-xylyloxy)valeric acid
$C_{15}H_{22}O_3$



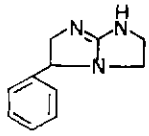
glaziovinum
glaziovine

(±)-glaziovine
$C_{18}H_{19}NO_3$



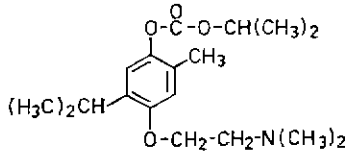
imafenum
imafen

2,3,5,6-tetrahydro-5-phenyl-1*H*-imidazo[1,2-*a*]imidazole
$C_{11}H_{13}N_3$



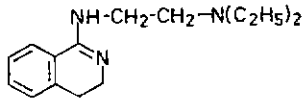
iproxaminum
iproxamine

5-[2-(dimethylamino)ethoxy]carvacryl isopropyl carbonate
$C_{18}H_{29}NO_4$



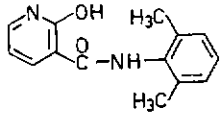
iquindaminum
iquindamine

1-[[2-(diethylamino)ethyl]amino]-3,4-dihydroisoquinoline
$C_{15}H_{23}N_3$



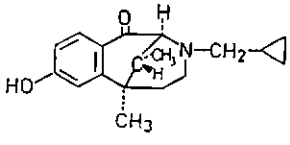
isonixinum
isonixin

2-hydroxy-2′,6′-nicotinoxylidide
$C_{14}H_{14}N_2O_2$



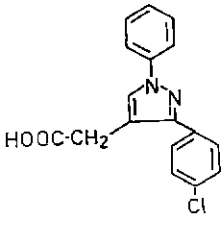
k[illegible]zocinum
[illegible]zocine

(2*R**,6*S**,11*S**)-3-(cyclopropylmethyl)-3,4,5,6-tetrahydro-8-hydroxy-6,11-dimethyl-2,6-methano-3-benzazocin-1(2*H*)-one
$C_{18}H_{23}NO_2$



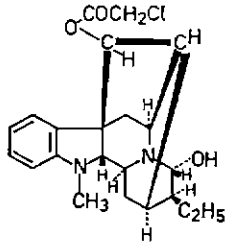
lonazolacum
lonazolac

3-(*p*-chlorophenyl)-1-phenylpyrazole-4-acetic acid
$C_{17}H_{13}ClN_2O_2$



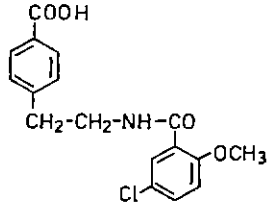
lorajminum
lorajmine

ajmaline 17-(chloroacetate)
$C_{22}H_{27}ClN_2O_3$



meglitinidum
meglitinide

*p*-[2-(5-chloro-*o*-anisamido)ethyl]benzoic acid
$C_{17}H_{16}ClNO_4$

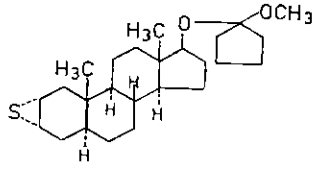


mepartricinum
mepartricin

a methyl ester of partricin, an antibiotic obtained from cultures of *Streptomyces aureofaciens* or produced by any other means

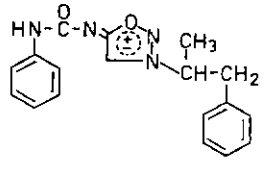
mepitiostanum
mepitiostane

cyclopentanone 2α,3α-epithio-5α-androstan-17β-yl methyl acetal
$C_{25}H_{40}O_2S$



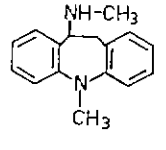
mesocarbum
mesocarb

3-(α-methylphenethyl)-*N*-(phenylcarbamoyl)sydnone imine
$C_{18}H_{18}N_4O_2$



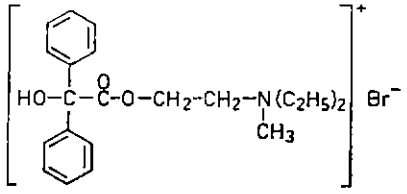
metapraminum
metapramine

10,11-dihydro-5-methyl-10-(methylamino)-5*H*-dibenz[*b*,*f*]azepine
$C_{16}H_{18}N_2$



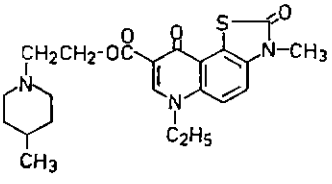
methylbenactyzii bromidum
methylbenactyzium bromide

diethyl(2-hydroxyethyl)methylammonium bromide benzilate
$C_{21}H_{28}BrNO_3$



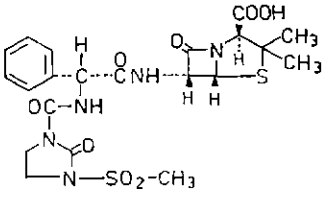
metioxatum
metioxate

2-(4-methylpiperidino)ethyl 6-ethyl-2,3,6,9-tetrahydro-3-methyl-2,9-dioxothiazolo[5,4-*f*]quinoline-8-carboxylate
$C_{22}H_{27}N_3O_4S$



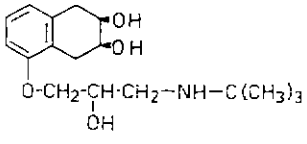
mezlocillinum
mezlocillin

(2*S*,5*R*,6*R*)-3,3-dimethyl-6-[(*R*)-2-[3-(methylsulfonyl)-2-oxo-1-imidazolidinecarboxamido]-2-phenylacetamido]-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid
$C_{21}H_{25}N_5O_8S_2$



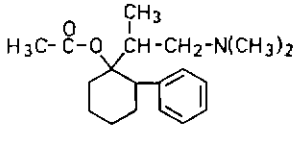
nadololum
nadolol

1-(*tert*-butylamino)-3-[(5,6,7,8-tetrahydro-*cis*-6,7-dihydroxy-1-naphthyl)-oxy]-2-propanol
$C_{17}H_{27}NO_4$



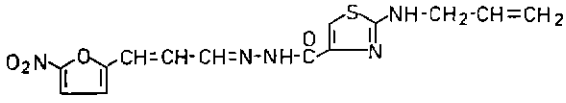
nexeridinum
nexeridine

1-[2-(dimethylamino)-1-methylethyl]-2-phenylcyclohexanol acetate (ester)
$C_{19}H_{29}NO_2$



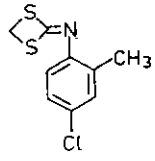
nifuralidum
nifuralide

2-(allylamino)-4-thiazolecarboxylic acid [3-(5-nitro-2-furyl)allylidene]-hydrazide
$C_{14}H_{13}N_5O_4S$



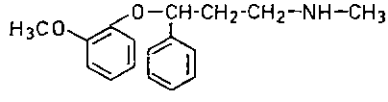
nimidanum
nimidane

cyclic methylene (4-chloro-*o*-tolyl)dithioimidocarbonate
$C_9H_8ClNS_2$



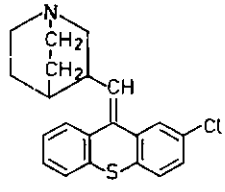
nisoxetinum
nisoxetine

(±)-3-(*o*-methoxyphenoxy)-*N*-methyl-3-phenylpropylamine
$C_{17}H_{21}NO_2$



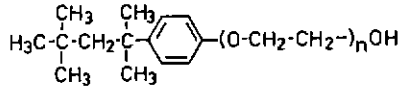
nuclotixenum
nuclotixene

3-[(2-chlorothioxanthen-9-ylidene)methyl]quinuclidine
$C_{21}H_{20}ClNS$



octoxinolum
octoxinol

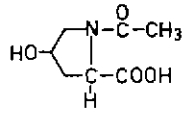
α-[*p*-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxypoly(oxyethylene)
general formula:



Each octoxinol name is followed by a number indicating the approximate number of oxyethylene groups present e.g. octoxinol 9 and 10, and the individual chemical names may contain a specific numerical syllable for the same purpose.

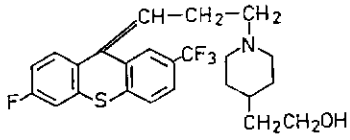
oxaceprolum
oxaceprol

(–)-1-acetyl-4-hydroxy-L-proline
$C_7H_{11}NO_4$



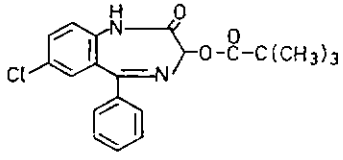
piflutixolum
piflutixol

1-[3-[6-fluoro-2-(trifluoromethyl)thioxanthen-9-ylidene]propyl]-4-piperidineethanol
$C_{24}H_{25}F_4NOS$



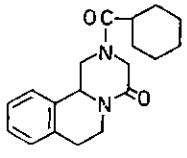
pivoxazepamum
pivoxazepam

7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-2*H*-1,4-benzodiazepin-2-one pivalate (ester)
$C_{20}H_{19}ClN_2O_3$



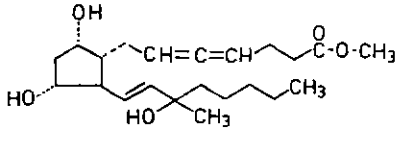
praziquantelum
praziquantel

2-(cyclohexylcarbonyl)-1,2,3,6,7,11b-hexahydro-4*H*-pyrazino[2,1-*a*]-isoquinolin-4-one
$C_{19}H_{24}N_2O_2$



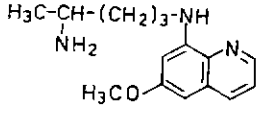
prostalenum
prostalene

(±)-methyl 7-[(1*R**,2*R**,3*R**,5*S**)-3,5-dihydroxy-2-[(*E*)-3-hydroxy-3-methyl-1-octenyl]cyclopentyl]-4,5-heptadienoate
$C_{22}H_{36}O_5$



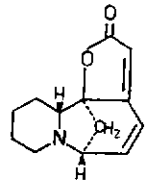
quinocidum
quinocide

8-[(4-aminopentyl)amino]-6-methoxyquinoline
$C_{15}H_{21}N_3O$



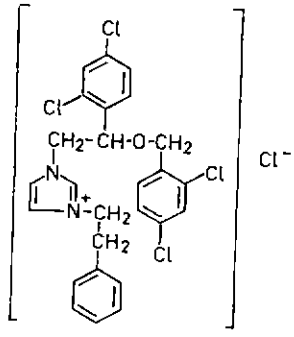
securininum
securinine

(6*S*,11a*R*,11b*S*)-9,10,11,11a-tetrahydro-8*H*-6,11b-methanofuro[2,3-*c*]-pyrido[1,2-*a*]azepin-2(6*H*)-one
$C_{13}H_{15}NO_2$



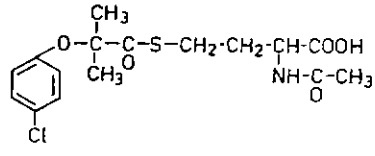
sepazonii chloridum
sepazonium chloride

1-[2,4-dichloro-β-[(2,4-dichlorobenzyl)oxy]phenethyl]-3-phenethylimidazolium chloride
$C_{26}H_{23}Cl_5N_2O$



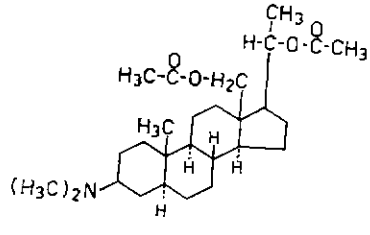
serfibratum
serfibrate

2-acetamido-4-mercaptobutyric acid 2-(*p*-chlorophenoxy)-2-methylpropionate (ester)
$C_{16}H_{20}ClNO_5S$



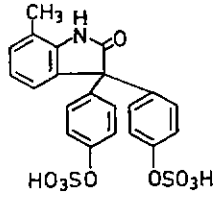
stevaladilum
stevaladil

3β-(dimethylamino)-5α-pregnane-18,20α-diol diacetate (ester)
$C_{27}H_{45}NO_4$



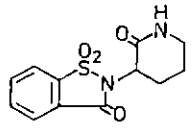
sulisatinum
sulisatin

3,3-bis(*p*-hydroxyphenyl)-7-methyl-2-indolinone bis(hydrogen sulfate) (ester)
$C_{21}H_{17}NO_9S_2$



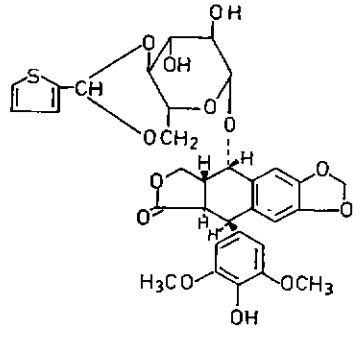
supidimidum
supidimide

2-(2-oxo-3-piperidyl)-1,2-benzisothiazolin-3-one 1,1-dioxide
$C_{12}H_{12}N_2O_4S$



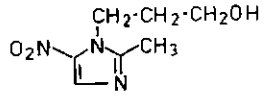
teniposidum
teniposide

4'-demethylepipodophyllotoxin 9-(4,6-*O*-2-thenylidene-β-D-glucopyranoside)
$C_{32}H_{32}O_{13}S$



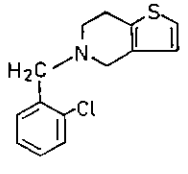
ternidazolum
ternidazole

2-methyl-5-nitroimidazole-1-propanol
$C_7H_{11}N_3O_3$



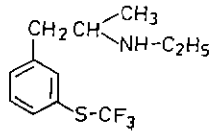
ticlopidinum
ticlopidine

5-(*o*-chlorobenzyl)-4,5,6,7-tetrahydrothieno[3,2-*c*]pyridine
$C_{14}H_{14}ClNS$



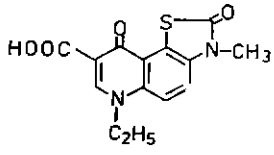
tiflorexum
tiflorex

(+)-*N*-ethyl-α-methyl-*m*-[(trifluoromethyl)thio]phenethylamine
$C_{12}H_{16}F_3NS$



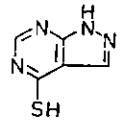
tioxacinum
tioxacin

6-ethyl-2,3,6,9-tetrahydro-3-methyl-2,9-dioxothiazolo[5,4-*f*]quinoline-8-carboxylic acid
$C_{14}H_{12}N_2O_4S$



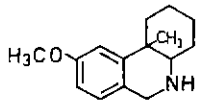
tisopurinum
tisopurine

1*H*-pyrazolo[3,4-*d*]pyrimidine-4-thiol
$C_5H_4N_4S$



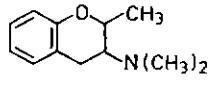
tofetridinum
tofetridine

(-)-1,2,3,4,4a,5,6,10b-octahydro-9-methoxy-10b-methylphenanthridine
$C_{15}H_{21}NO$



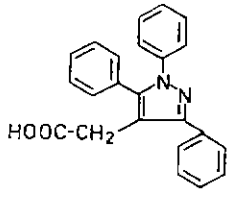
trebenzominum
trebenzomine

(±)-*N*,*N*,2-trimethyl-3-chromanamine, racemate I
$C_{12}H_{17}NO$

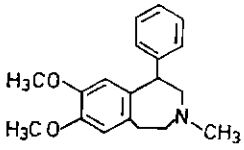


trifezolacum
trifezolac

1,3,5-triphenylpyrazole-4-acetic acid
$C_{23}H_{18}N_2O_2$



| *Proposed International Nonproprietary Name* (Latin, English) | *Chemical Name or Description, Molecular and Graphic Formulae* |
|---|---|
| trimopamum<br>trimopam | (+)-2,3,4,5-tetrahydro-7,8-dimethoxy-3-methyl-1-phenyl-1*H*-3-benzazepine<br>$C_{19}H_{23}NO_2$ |



## AMENDMENTS TO PREVIOUS LISTS

Vol. 25, No. 9

### Proposed International Nonproprietary Names (Prop. INN): List 26

p. 430 *delete the following entries*

| | |
|---|---|
| poloxamerum 331<br>poloxamer 331 | poloxamerum 407<br>poloxamer 407 |
| *insert* | |
| poloxamerum<br>poloxamer | α-hydro-ω-hydroxypoly(oxyethylene)poly(oxypropylene)poly(oxyethylene) block copolymer.<br>General formula $H\text{-}(OCH_2CH_2)_a(OCHCH_2)_b(OCH_2CH_2)_c\text{-}OH$ (with $CH_3$ on the CHCH$_2$ unit)<br>Each poloxamer name is followed by a number, e.g., poloxamer 188, 331, 407 etc. The first two digits multiplied by 100 correspond to the approximate average molecular weight of the poly(oxypropylene) portion; the third digit multiplied by 10 corresponds to the percentage by weight of the poly(oxyethylene) portion. |

Supplement to Vol. 27, No. 3

### Proposed International Nonproprietary Names (Prop. INN): List 29

| | | |
|---|---|---|
| p. 124 | ceruletidum<br>ceruletide | *replace chemical name by the following:*<br>5-oxo-L-prolyl-L-glutaminyl-L-aspartyl-L-tyrosyl-L-threonylglycyl-L-tryptophyl-L-methionyl-L-aspartyl-L-phenylalaninamide 4-(hydrogen sulfate) (ester) |

Supplement to Vol. 28, No. 9

### Proposed International Nonproprietary Names (Prop. INN): List 32

| | | |
|---|---|---|
| p. 18 | *delete*<br>sulimarinum<br>sulimarin | *insert*<br>sulmarinum<br>sulmarin |

p. 45 *delete the following entries*

| | |
|---|---|
| dextranum 40<br>dextran 40 | dextranum 110<br>dextran 110 |
| dextranum 45<br>dextran 45 | dextranum 150<br>dextran 150 |
| dextranum 75<br>dextran 75 | |

*insert*

| | |
|---|---|
| dextranum<br>dextran | polyanhydroglucose produced by the action of *Leuconostoc mesenteroides* on sucrose and subsequent controlled hydrolysis and fractionation of the high molecular weight dextran thus formed, or the same substance obtained by any other means. The weight-average molecular weight is referred to by a specifying number: e.g. dextran 40, 45, 70, 110, 150. The number multiplied by 1,000 corresponds to the approximate weight-average molecular weig e.g. dextran 40 has a weight-average molecular weight of about 40,000. |

p. 50 *delete the following entries*

| | |
|---|---|
| dimeticonum 20<br>dimeticone 20 | dimeticonum 500<br>dimeticone 500 |
| dimeticonum 200<br>dimeticone 200 | dimeticonum 1000<br>dimeticone 1000 |
| dimeticonum 350<br>dimeticone 350 | |

*insert*

| | |
|---|---|
| dimeticonum<br>dimeticone | poly(dimethylsiloxane) |

Each dimeticone name is followed by a number referring to the viscosity of the substance: e.g.

| | |
|---|---|
| dimeticone 20 | (viscosity of 17.0 to 23.0 centistokes) |
| dimeticone 200 | (viscosity of 190 to 210 centistokes) |
| dimeticone 350 | (viscosity of 330 to 370 centistokes) |
| dimeticone 500 | (viscosity of 475 to 525 centistokes) |
| dimeticone 1000 | (viscosity of 950 to 1050 centistokes) |

p. 77 *delete*

lopraminum
lopramine

*insert*

lofepraminum
lofepramine

p. 77 *delete the following entries*

| | |
|---|---|
| macrogoli lauras 600<br>macrogol laurate 600 | |
| macrogoli oleas 600<br>macrogol oleate 600 | |
| macrogoli stearas 400<br>macrogol stearate 400 | |

p. 78 *delete the following entries*

| | |
|---|---|
| macrogoli stearas 600<br>magrogol stearate 600 | |
| macrogoli stearas 1000<br>macrogol stearate 1000 | |
| macrogoli stearas 2000<br>macrogol stearate 2000 | |

*insert*

| | |
|---|---|
| macrogoli ester<br>macrogol ester | monoester derived from a polyethylene glycol and a fatty acid of general formula $H\text{-}(OCH_2CH_2)\text{-}OOCR$<br>Contains small amounts of the corresponding diester and unesterified glycol. Each macrogol ester name is followed by a number corresponding approximately to the average molecular weight of the polyethylene glycol portion. e.g. macrogol laurate 600, macrogol oleate 600, macrogol stearate 400, 600, 1000 and 2000. |

p. 78 *delete the following entries*

| | |
|---|---|
| macrogolum 400<br>macrogol 400 | macrogolum 4000<br>macrogol 4000 |
| macrogolum 1000<br>macrogol 1000 | |

*insert*

| | |
|---|---|
| macrogolum<br>macrogol | polyethylene glycol of general formula $H-(OCH_2CH_2)_n-OH$ where n varies from 3 to 225 approximately. Each macrogol name is followed by a number corresponding approximately to its average molecular weight, e.g. macrogol 300, 400, 1000, 4000. |

p. 87 *delete the entry*

metylperonum
metylperone

p. 80 *insert after the entry " melitracenum "*

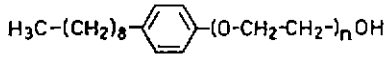
| | |
|---|---|
| melperonum<br>melperone | 4'-fluoro-4-(4-methylpiperidino)butyrophenone<br>$C_{16}H_{22}FNO$ |

p. 96 *delete the following entries*

| | |
|---|---|
| nonoxinolum 4<br>nonoxinol 4 | nonoxinolum 15<br>nonoxinol 15 |
| nonoxinolum 9<br>nonoxinol 9 | nonoxinolum 30<br>nonoxinol 30 |

*insert*

| | |
|---|---|
| nonoxinolum<br>nonoxinol | α-(*p*-nonylphenyl)-ω-hydroxypoly(oxyethylene)<br>General formula: |



Each nonoxinol name is followed by a number indicating the approximate number of oxyethylene groups present, e.g. nonoxinol 4, 9, 15, and 30, and the individual chemical names may contain a specific numerical syllable for the same purpose.

p. 110 *delete the following entry*

poloxalkolum
poloxalkol

## 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 substances, 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 substance 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 prejudice 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.

* 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.*, 1969, 173, 10).

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

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

1. International Nonproprietary Names (INN) should be distinctive in sound and spelling. They should not be inconveniently long and should not be liable to confusion with names in common use.

2. The INN 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.

*These primary principles are to be implemented by using the following secondary principles*

3. In devising the INN of the first substance in a new pharmacological group, consideration should be given to the possibility of devising suitable INN for related substance, belonging to the new group.

4. In devising INN for acids, one-word names are preferred; their salts should be named without modifying the acid name, e.g., "oxacillin" and "oxacillin sodium", "ibufenac" and "ibufenac sodium".

5. INN for substances that 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.

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.

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

7. To facilitate the translation and pronunciation of INN, "f" should be used instead of "ph", "t" instead of "th", "e" instead of "ae" or "oe", and "i" instead of "y"; the use of the letters "h" and "k" should be avoided.

8. 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.

9. Group relationship in INN (see Guiding Principle 2) should if possible be shown by using a stem from the following list. The stem should only be used for substances of the appropriate group. Where a stem is shown without any hyphens it may be used anywhere in the name.

Subsidiary group relationships should be shown by devising INN that show similarities to and are analogous with a previously named substance.

| *Latin* | *English* | *French* | |
|---|---|---|---|
| -actidum | -actide | -actide | synthetic polypeptides with a corticotrophin-like action |
| andr | andr | andr | steroids, androgens |
| -arolum | -arol | -arol | anticoagulants of the dicoumarol group |
| -azepamum | -azepam | -azépam | substances of the diazepam group |
| bol | bol | bol | steroids, anabolic |
| -buzonum | -buzone | -buzone | anti-inflammatory analgesics of the phenylbutazone group |
| -cainum | -caine | -caïne | local anaesthetics |
| cef- | cef- | céf- | antibiotics, derivatives of cefalosporanic acid |
| -cillinum | -cillin | -cilline | antibiotics, derivatives of 6-aminopenicillanic acid |
| cort | cort | cort | corticosteroids, except those of the prednisolone group |
| -cyclinum | -cycline | -cycline | antibiotics of the tetracycline group |
| estr | estr | estr | estrogenic substances |
| -fibratum | -fibrate | -fibrate | substances of the clofibrate group |
| -forminum | -formin | -formine | hypoglycemics of the phenformin group |
| gest | gest | gest | steroids, progestogens |
| gli- | gli- | gli- | sulfonamide hypoglycemics |
| io- | io- | io- | iodine-containing contrast media |
| -ium | -ium | -ium | quaternary ammonium compounds |
| -metacinum | -metacin | -métacine | anti-inflammatory substances of the indometacin group |
| -mycinum | -mycin | -mycine | antibiotics, produced by *Streptomyces* strains |
| -nidazolum | -nidazole | -nidazole | antiprotozoal substances of the metronidazole group |
| -ololum | -olol | -olol | β-adrenergic blocking agents of the propranolol group |
| -onidum | -onide | -onide | steroids for topical use, containing an acetal group |
| -orexum | -orex | -orex | anorexigenic agents, phenethylamine derivatives |
| -praminum | -pramine | -pramine | substances of the imipramine group |
| -profenum | -profen | -profène | anti-inflammatory substances of the ibuprofen group |
| prost | prost | prost | prostaglandins |
| -relinum | -relin | -réline | hypophyseal hormone release-stimulating peptides |
| sulfa- | sulfa- | sulfa- | sulfonamides, anti-infective |
| -terolum | -terol | -térol | bronchodilators, phenethylamine derivatives |
| -tizidum | -tizide | -tizide | diuretics of the chlorothiazide group |
| -verinum | -verine | -vérine | spasmolytics with a papaverine-like action |