

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 of the use of the substance in medicine or pharmacy.

PROPOSED INTERNATIONAL NONPROPRIETARY NAMES (*Prop. I.N.N.*): LIST 24²

Proposed International Nonproprietary Name (Latin, English)	Chemical Name or Description, Molecular and Graphic Formulae
acidum iozomicum iozomic acid	3,3'-[tetramethylenebis[oxy(2-hydroxytrimethylene)(acetylmino)]]-bis[2,4,6-triiodo-5-(<i>N</i> -methylacetamido)benzoic acid] C ₃₄ H ₄₆ I ₆ N ₄ O ₁₂
acidum mycophenolicum mycophenolic acid	(<i>E</i>)-6-(4-hydroxy-6-methoxy-7-methyl-3-oxo-5-phthalanyl)-4-methyl-4-hexenoic acid C ₁₇ H ₂₀ O ₆

¹ See Annex, p. 24.

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, 183, 418; 1970, 24, 119.

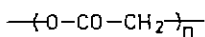
Lists of recommended international nonproprietary names were published in *Chron. Wild Hlth Org.*, 1955, 9, 185; *WHO Chronicle*, 1959, 13, 106, 463; 1962, 16, 101; 1965, 19, 165, 206, 249; 1966, 20, 421, 1967, 21, 538, 1968, 22, 463; 1969, 23, 490.

*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

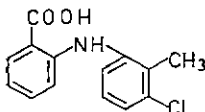
acidum polyglycolicum
polyglycolic acid

poly(oxycarbonylmethylene)
(C₂H₂O₂)_n



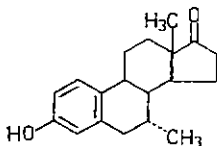
acidum tolfenamicum
tolfenamic acid

N-(3-chloro-*o*-tolyl)anthranilic acid
C₁₄H₁₂ClNO₂



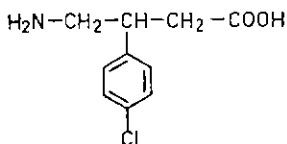
almestronum
almestrone

3-hydroxy-7 α -methylestra-1,3,5(10)-trien-17-one
C₁₈H₂₄O₂



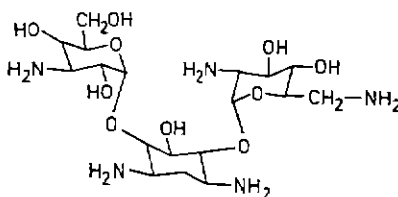
baclofenum
baclofen

β -(aminomethyl)-*p*-chlorohydrocinnamic acid
C₁₀H₁₂ClNO₂



bekanamycinum
bekanamycin

kanamycin B or L-O-3-amino-3-deoxy- α -D-glucopyranosyl-(1 \rightarrow 4)-O-
[2,6-diamino-2,6-dideoxy- α -D-glucopyranosyl-(1 \rightarrow 6)]-2-deoxystrept-
amine
C₁₈H₃₇N₅O₁₀

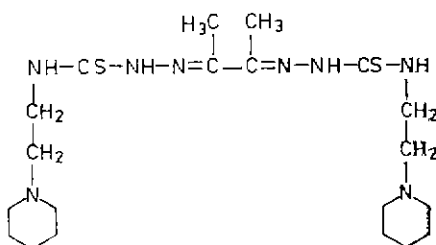


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

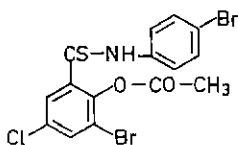
bitipazonum
bitipazone

2,3-butanedione bis[4-(2-piperidinoethyl)thiosemicarbazone]
 $C_{20}H_{31}N_5S_2$



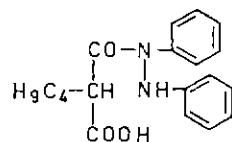
brotianidum
brotianide

3,4'-dibromo-5-chlorothiosalicylanilide acetate (ester)
 $C_{15}H_{10}Br_2ClNO_2S$



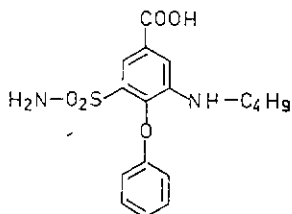
bumadizonum
bumadizone

butylmalonic acid mono(1,2-diphenylhydrazide)
 $C_{19}H_{22}N_2O_5$



bumetanidum
bumetanide

3-(butylamino)-4-phenoxy-5-sulfamoylbenzoic acid
 $C_{17}H_{20}N_2O_5S$

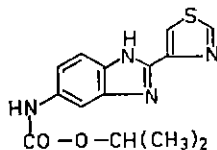


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

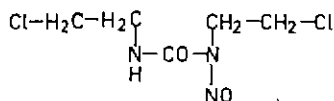
**cambendazolom
cambendazole**

isopropyl 2-(4-thiazolyl)-5-benzimidazolecarbamate
 $C_{14}H_{14}N_4O_2S$



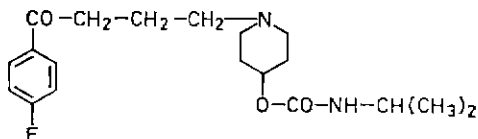
**carmustinum
carmustine**

1,3-bis(2-chloroethyl)-1-nitrosourea
 $C_3H_5Cl_2N_3O_2$



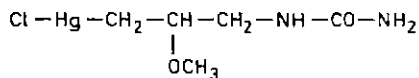
**carperonom
carperone**

isopropylcarbamic acid ester with 4'-fluoro-4-(4-hydroxypiperidino)butyrophenone
 $C_{19}H_{27}FN_2O_3$



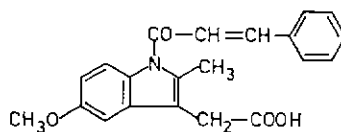
**chlormerodrinum (^{197}Hg)
chlormerodrin (^{197}Hg)**

[3-(chloromercuri- ^{197}Hg)-2-methoxypropyl]urea
 $C_5H_{11}ClHgN_2O_2$



**cinmetacinum
cinmetacin**

1-cinnamoyl-5-methoxy-2-methylindole-3-acetic acid
 $C_{21}H_{19}NO_4$

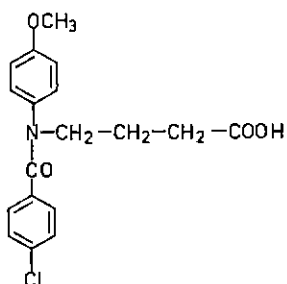


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

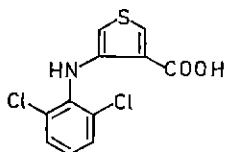
clanobutinum
clanobutin

4-[*p*-chloro-*N*-(*p*-methoxyphenyl)benzamido]butyric acid
C₁₈H₁₈ClNO₄



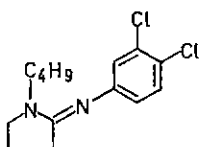
clantifenum
clantifen

4-(2,6-dichloroanilino)-3-thiophenecarboxylic acid
C₁₁H₇Cl₂NO₂S



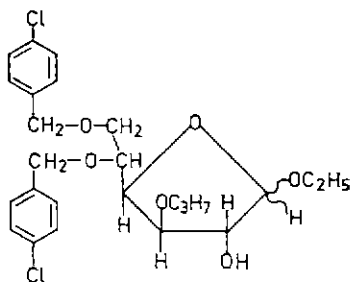
clenpirinum
clenpirin

1-butyl-2-[(3,4-dichlorophenyl)imino]pyrrolidine
C₁₄H₁₈Cl₂N₂



clobenosidum
clobenoside

ethyl 5,6-bis-*O*-(*p*-chlorobenzyl)-3-*O*-propyl-*D*-glucofuranoside
C₂₅H₃₂Cl₂O₆

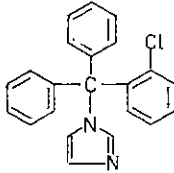


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

.clotrimazolom
.clotrimazole

1-(o-chloro- α,α -diphenylbenzyl)imidazole
 $C_{22}H_{17}ClN_2$



.codactidum
codactide

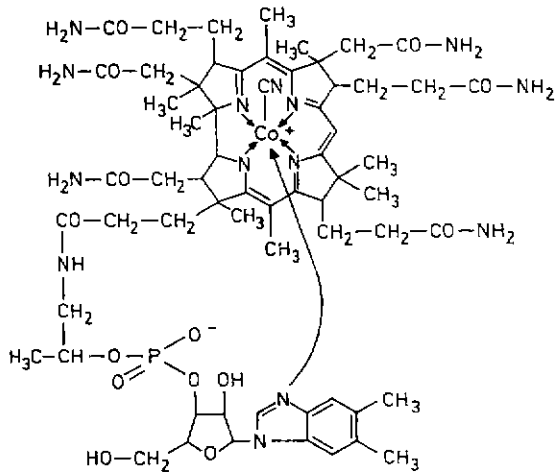
1-D-serine-17-L-lysine-18-L-lysylamide- α^{1-18} -corticotropin
or H-D-Ser-L-Tyr-L-Ser-L-Met-L-Glu-L-His-L-Phe-L-Arg-L-Trp-Gly-L-
Lys-L-Pro-L-Val-Gly-L-Lys-L-Lys-L-Lys-L-Lys-NH₂
 $C_{101}H_{158}N_{20}O_{23}S$

.cyanocobalaminum (^{57}Co)
cyanocobalamin (^{57}Co)

vitamin B₁₂ containing radioactive cobalt (^{57}Co)
 $C_{63}H_{88}CoN_{14}O_{14}P$

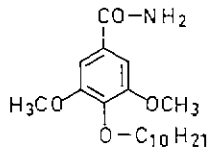
.cyanocobalaminum (^{58}Co)
cyanocobalamin (^{58}Co)

vitamin B₁₂ containing radioactive cobalt (^{58}Co)
 $C_{63}H_{88}CoN_{14}O_{14}P$



.decimemidum
decimemide

4-(decyloxy)-3,5-dimethoxybenzamide
 $C_{19}H_{31}NO_4$

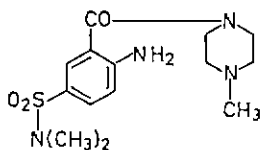


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

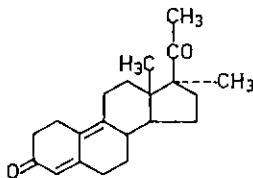
delfantrinum
delfantrine

N,N'-dimethyl-3-[(4-methyl-1-piperazini)carbonyl]sulfanilamide
 $C_{14}H_{22}N_4O_3S$



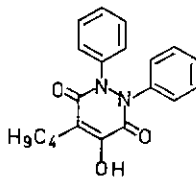
demegestonum
demegestone

17-methyl-19-norpregna-4,9-diene-3,20-dione
 $C_{21}H_{28}O_2$



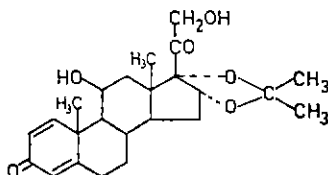
denpidazonum
denpidazone

4-butyl-1,2-dihydro-5-hydroxy-1,2-diphenyl-3,6-pyridazinedione
 $C_{20}H_{26}N_2O_3$



desonidum
desonide

11 β ,16 α ,17,21-tetrahydroxypregna-1,4-diene-3,20-dione cyclic
16,17-acetal with acetone
 $C_{24}H_{32}O_6$

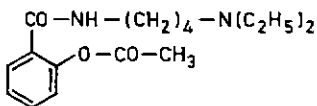


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

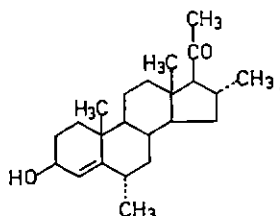
dibusadolium
dibusadol

N-[4-(diethylamino)butyl]salicylamide acetate (ester)
C₁₇H₂₄N₂O₃



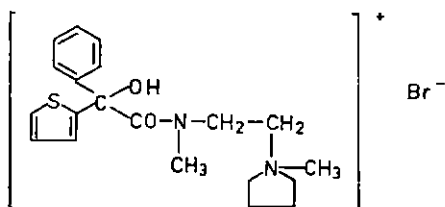
dimepregnenum
dimepregnen

3 β -hydroxy-6 α ,16 α -dimethylpregn-4-en-20-one
C₂₃H₃₆O₂



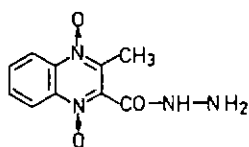
dotefonil bromidum
dotefonium bromide

1-methyl-1-[2-(*N*-methyl- α -2-thienylmandelamido)ethyl]pyrrolidinium
bromide
C₂₀H₂₇BrN₂O₂S



drazidoxum
drazidox

3-methyl-2-quinoxalinecarboxylic acid hydrazide 1,4-dioxide
C₁₀H₁₀N₄O₃

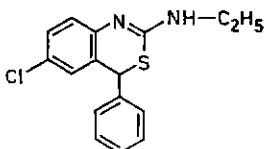


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

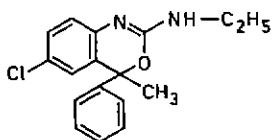
etasulinum
etasuline

6-chloro-2-(ethylamino)-4-phenyl-4*H*-3,1-benzothiazine
C₁₆H₁₅ClN₂S



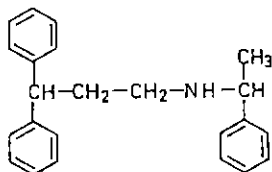
etifoxinum
etifoxine

6-chloro-2-(ethylamino)-4-methyl-4-phenyl-4*H*-3,1-benzoxazine
C₁₇H₁₇ClN₂O



fendilinum
fendiline

N-(3,3-diphenylpropyl)- α -methylbenzylamine
C₂₃H₂₅N

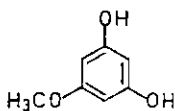


ferrī citratis (⁵⁹Fe) injectio
ferric citrate (⁵⁹Fe) injection

a sterile solution containing radioactive iron (⁵⁹Fe) in the ferric state, 1 per cent w/v of sodium citrate, and sufficient sodium chloride to make the solution isotonic with blood

flamenolum
flamenol

5-methoxyresorcinol
C₇H₆O₃

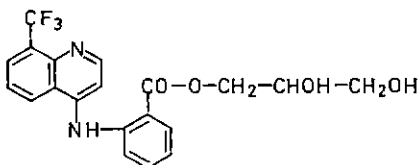


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

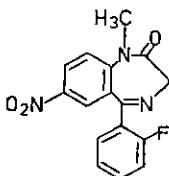
floctafeninum
floctafenine

2,3-dihydroxypropyl *N*-[8-(trifluoromethyl)-4-quinoly]anthranilate
 $C_{20}H_{17}F_3N_2O_4$



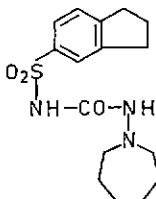
flunitrazepamum
flunitrazepam

5-(*o*-fluorophenyl)-1,3-dihydro-1-methyl-7-nitro-2*H*-1,4-benzodiazepin-2-one
 $C_{16}H_{12}FN_3O_3$



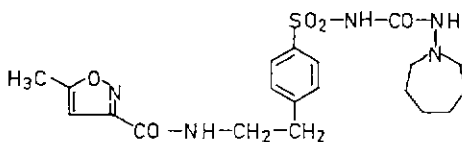
glidazamidum
glidazamide

1-(hexahydro-1*H*-azepin-1-yl)-3-(5-indansulfonyl)urea
 $C_{16}H_{23}N_3O_3S$



glisoxepidum
glisoxepide

1-(hexahydro-1*H*-azepin-1-yl)-3-[[*p*-[2-(5-methyl-3-isoxazofecarboxamido)ethyl]phenyl]sulfonyl]urea
 $C_{20}H_{27}N_5O_3S$

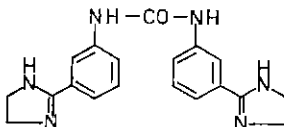


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

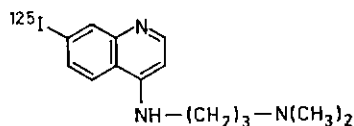
imidocarbium
imidocarb

3,3'-di-2-imidazolin-2-ylcarbanilide
 $C_{19}H_{20}N_6O$



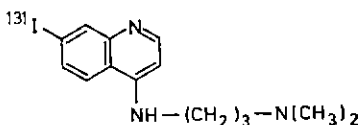
iometinum (^{125}I)
iometin (^{125}I)

4-[[3-(dimethylamino)propyl]-amino]-7-iodoquinoline in which a portion of the molecules contain radioactive iodine (^{125}I)
 $C_{14}H_{18}IN_3$



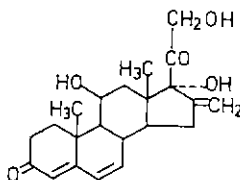
iometinum (^{131}I)
iometin (^{131}I)

4-[[3-(dimethylamino)propyl]-amino]-7-iodoquinoline in which a portion of the molecules contain radioactive iodine (^{131}I)
 $C_{14}H_{18}IN_3$



isoprednidenum
isoprednidene

11 β ,17,21-trihydroxy-16-methylenepregna-4,6-diene-3,20-dione
 $C_{22}H_{26}O_5$

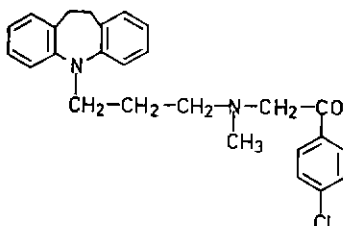


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

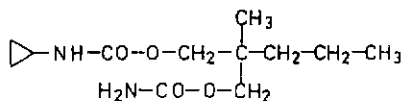
Iopraminum
Iopramine

4'-chloro-2-[[3-(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)propyl]-
methylamino]acetophenone
C₂₄H₂₇ClN₂O



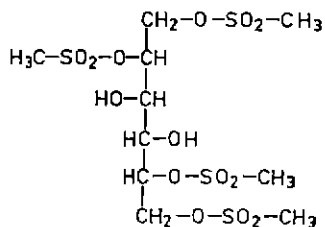
Iorbamatum
Iorbamate

2-(hydroxymethyl)-2-methylpentyl cyclopropanecarbamate
carbamate (ester)
C₁₂H₂₂N₂O₄



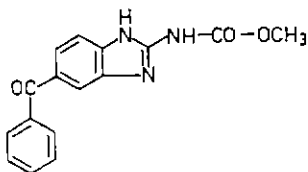
mannosulfanum
mannosulfan

D-mannitol 1,2,5,6-tetramethanesulfonate
C₁₀H₂₂O₁₄S₄



mebendazolium
mebendazole

methyl 5-benzoyl-2-benzimidazoicarbamate
C₁₆H₁₃N₃O₃

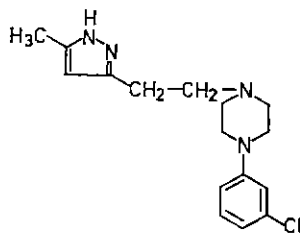


Proposed International
Nonproprietary Name
(Latin, English)

Chemical Name or Description,
Molecular and Graphic Formulae

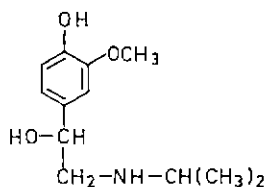
mepiprazolum
mepiprazole

1-(*m*-chlorophenyl)-4-[2-(5-methylpyrazol-3-yl)ethyl]piperazine
 $C_{16}H_{21}ClN_4$



metiprenalinum
metiprenaline

α -[(isopropylamino)methyl]vanillyl alcohol
 $C_{12}H_{19}NO_3$

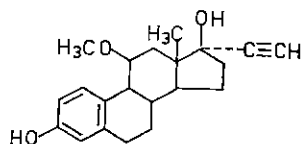


mitosperum
mitosper

an antineoplastic antibiotic obtained from cultures of an *Aspergillus* of the *glaucus* group, or the same substance obtained by any other means

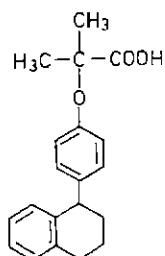
moxestrolum
moxestrol

11 β -methoxy-19-nor-17 α -pregna-1,3,5(10)-trien-20-yne-3,17-diol
 $C_{27}H_{42}O_3$



nafenopinum
nafepopin

2-methyl-2-[*p*-(1,2,3,4-tetrahydro-1-naphthyl)phenoxy]propionic acid
 $C_{20}H_{22}O_3$



*Proposed International
Nonproprietary Name
(Latin, English)*

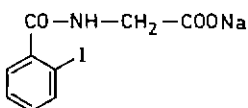
*Chemical Name or Description,
Molecular and Graphic Formulæ*

natrii iodidum (¹²⁵I)
sodium iodide (¹²⁵I)

radioactive sodium iodide (¹²⁵I)
NaI

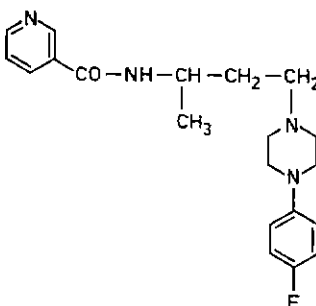
natrii iodohippuras (¹³¹I)
sodium iodohippurate (¹³¹I)

sodium *o*-iodohippurate in which a portion of the molecules contain
radioactive iodine (¹³¹I)
C₈H₇INNaO₃



niaprazinum
niaprazine

N-[3-[4-(*p*-fluorophenyl)-1-piperazinyl]-1-methylpropyl]nicotinamide
C₂₀H₂₅FN₄O

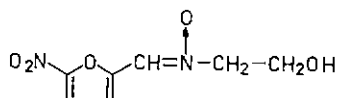


nifunginum
nifungin

an antifungal antibiotic obtained from cultures of *Aspergillus giganteus*, or the same substance obtained by any other means

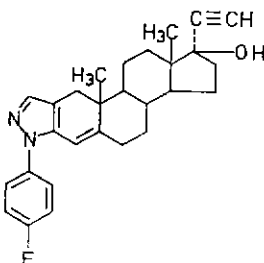
nifuratronum
nifuratrone

N-(2-hydroxyethyl)- α -(5-nitro-2-furyl)nitron
C₇H₈N₂O₅



nivacortolum
nivacortol

2'-(*p*-fluorophenyl)-2'*H*-17 α -pregna-2,4-dien-20-yno[3,2-*c*]pyrazol-
17-ol
C₂₄H₃₇FN₂O

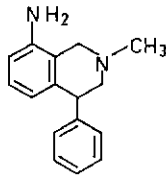


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

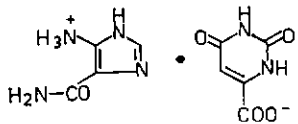
nomifensinum
nomifensine

8-amino-1,2,3,4-tetrahydro-2-methyl-4-phenylisoquinoline
 $C_{15}H_{16}N_2$



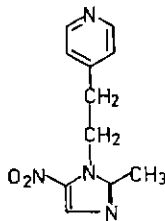
orazamidum
orazamide

5-aminoimidazole-4-carboxamide orotate
 $C_4H_5N_4O \cdot C_5H_4N_2O_4$



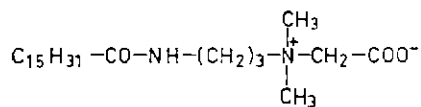
panidazolom
panidazole

4-[2-(2-methyl-5-nitroimidazol-1-yl)ethyl]pyridine
 $C_{11}H_{12}N_4O_2$



pendecamainum
pendecamaine

(carboxymethyl)dimethyl(3-palmitamidopropyl)ammonium hydroxide
inner salt
 $C_{23}H_{46}N_2O_3$

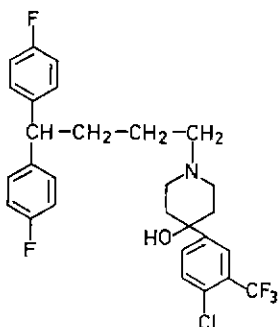


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

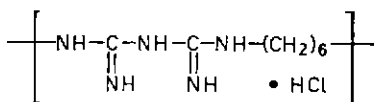
penfluridolum
penfluridol

4-(4-chloro- α,α,α -trifluoro-*m*-tolyl)-1-[4,4-bis(*p*-fluorophenyl)butyl]-
4-piperidinol
 $C_{24}H_{27}ClF_5NO$



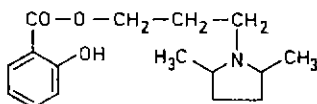
polihexanidum
polihexanide

poly(iminoimidocarbonyliminoimidocarbonyliminohexamethylene
monohydrochloride)
 $(C_6H_{17}N_5 \cdot HCl)_n$



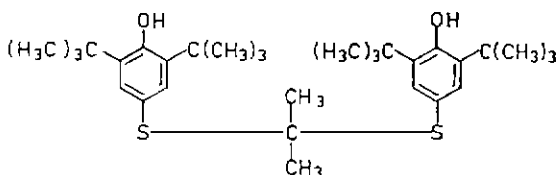
pranosalum
pranosal

2,5-dimethyl-1-pyrrolidinepropanol salicylate (ester)
 $C_{16}H_{23}NO_3$



probucolum
probucol

acetone bis(3,5-di-*tert*-butyl-4-hydroxyphenyl)mercaptole
 $C_{31}H_{44}O_2S_2$

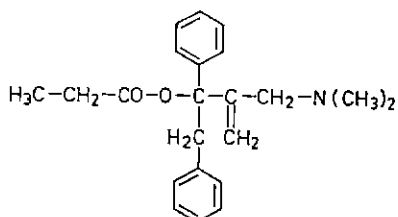


*Proposed International
Nonproprietary Name
(Latin, English)*

proxibutenum
proxibutene

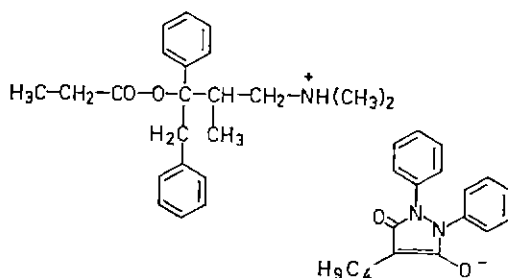
*Chemical Name or Description,
Molecular and Graphic Formulae*

3-[(dimethylamino)methyl]-1,2-diphenyl-3-buten-2-ol propionate
(ester)
 $C_{22}H_{27}NO_2$



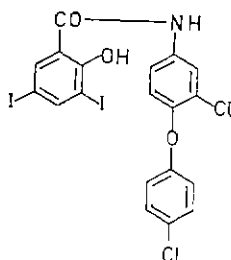
proxifezonum
proxifezone

(+)-4-(dimethylamino)-3-methyl-1,2-diphenyl-2-butanol propionate
(ester) compound with 4-butyl-1,2-diphenyl-3,5-pyrazolidinedione
(1 : 1)
 $C_{22}H_{29}NO_2 \cdot C_{19}H_{20}N_2O_2$



rafoxanidum
rafoxanide

3'-chloro-4'-(p-chlorophenoxy)-3,5-diiodosalicylanilide
 $C_{19}H_{11}Cl_2I_2NO_3$

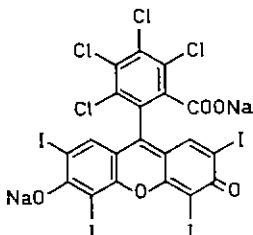


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

roseum bengalense natricum (¹³¹I)
rose bengal sodium (¹³¹I)

disodium 4,5,6,7-tetrachloro-2',4',5',7'-tetraiodofluorescein in which a
portion of the molecules contain radioactive iodine (¹³¹I)
C₂₀H₂Cl₄I₄Na₂O₅



seroalbuminum humanum
iodinatum (¹²⁵I)
iodinated (¹²⁵I) human serum
albumin

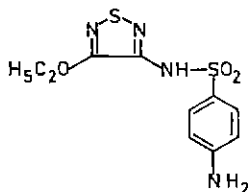
human serum albumin iodinated with radioactive iodine (¹²⁵I)

seroalbuminum humanum
iodinatum (¹³¹I)
iodinated (¹³¹I) human serum
albumin

human serum albumin iodinated with radioactive iodine (¹³¹I)

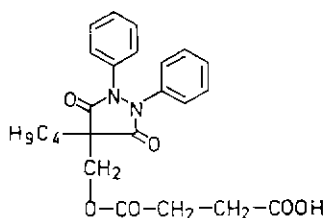
sulfatrozolum
sulfatrozole

N'-(4-ethoxy-1,2,5-thiadiazol-3-yl)sulfanilamide
C₁₀H₁₂N₄O₃S₂



suxibuzonom
suxibuzone

4-butyl-4-(hydroxymethyl)-1,2-diphenyl-3,5-pyrazolidinedione
hydrogen succinate (ester)
C₂₄H₂₆N₂O₄

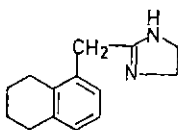


*Proposed International
Nonproprietary Name
(Latin, English)*

*Chemical Name or Description,
Molecular and Graphic Formulae*

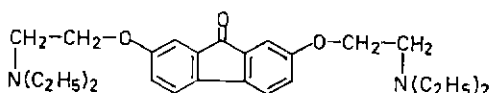
tefazolinum
tefazoline

2-[(5,6,7,8-tetrahydro-1-naphthyl)methyl]-2-imidazoline
C₁₄H₁₈N₂



tiloronum
tilorone

2,7-bis[2-(diethylamino)ethoxy]fluoren-9-one
C₂₅H₃₄N₂O₃

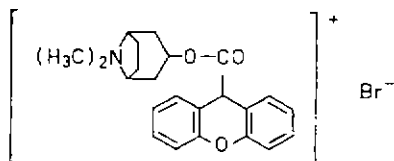


tosactidum
tosactide

α^{1-28} -corticotropin (human) or H-L-Ser-L-Tyr-L-Ser-L-Met-L-Glu-L-His-L-Phe-L-Arg-L-Trp-Gly-L-Lys-L-Pro-L-Val-Gly-L-Lys-L-Lys-L-Arg-L-Arg-L-Pro-L-Val-L-Lys-L-Val-L-Tyr-L-Pro-L-Asp-L-Ala-Gly-L-Glu-OH
C₁₅₀H₂₃₀N₄₄O₃₈S

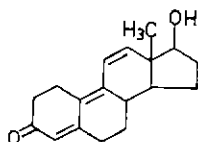
trantelinii bromidum
trantelinium bromide

8-methyltropinium bromide xanthene-9-carboxylate
C₂₁H₂₄BrNO₃



trenbolonum
trenbolone

17 β -hydroxyestra-4,9,11-trien-3-one
C₁₈H₂₂O₂



xenonum (¹³³Xe)
xenon (¹³³Xe)

radioactive xenon (¹³³Xe)
Xe

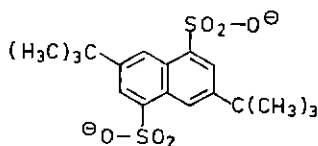
NAMES FOR RADICALS AND GROUPS

Some preparations for which a proposed international nonproprietary name has been established may be used in the form of salts or esters. The radicals or groups involved may be of complex composition and it is then inconvenient to refer to them in system-

atic chemical nomenclature. The following shorter nonproprietary names for some such radicals and groups have been devised or selected, and they are suggested for use with the proposed international nonproprietary names.

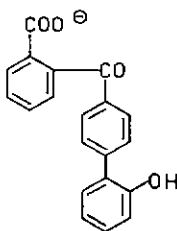
3,7-di-*tert*-butyl-1,5-naphthalenedisulfonate
 $C_{11}H_{22}O_4S_2^-$

bunapsilate



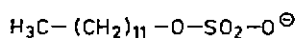
o-[(2'-hydroxy-4-biphenyl)carbonyl]benzoate
 $C_{20}H_{13}O_4^-$

fendizoate



n-dodecylsulfate
 $C_{12}H_{25}O_4S^-$

laurilsulfate



AMENDMENTS TO PREVIOUS LISTS

Vol. 21, No. 11

PROPOSED INTERNATIONAL NONPROPRIETARY NAMES (*Prop. I.N.N.*): LIST 18

p. 490:	<i>delete</i>	<i>insert</i>
	natrii radioiotalamas (¹²⁵ I)	natrii iotalamas (¹²⁵ I)
	sodium radioiotalamate (¹²⁵ I)	sodium iotalamate (¹²⁵ I)
p. 491:	<i>delete</i>	<i>insert</i>
	natrii radioiotalamas (¹³¹ I)	natrii iotalamas (¹³¹ I)
	sodium radioiotalamate (¹³¹ I)	sodium iotalamate (¹³¹ I)
p. 495:	<i>delete</i>	<i>insert</i>
	radiocesii chloridum (¹³¹ Cs)	cesii (¹³¹ Cs) chloridum
	radiocesium chloride (¹³¹ Cs)	cesium (¹³¹ Cs) chloride

Vol. 22, No. 3

PROPOSED INTERNATIONAL NONPROPRIETARY NAMES (*Prop. I.N.N.*): LIST 19

p. 119:	<i>delete</i>	<i>insert</i>
	kellofyllinum	visnafyllinum
	kellofylline	visnafylline

Vol. 23, No. 9

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

p. 428:	<i>delete</i>	<i>insert</i>
	ecinaminum	etifelminum
	ecinamine	etifelmine
p. 433:	<i>delete</i>	
	laramycinum	an antibiotic obtained from cultures of <i>Streptomyces bikiniensis</i> var. <i>laranensis</i> , or the same substance obtained by any other means
	laramycin	

Vol. 24, No. 3

PROPOSED INTERNATIONAL NONPROPRIETARY NAMES (*Prop. I.N.N.*): LIST 23

p. 131:	<i>delete</i>	<i>insert</i>
	mofedionum	oxazidionum
	mofedione	oxazidione

INTERNATIONAL NONPROPRIETARY NAMES FOR PHARMACEUTICAL
PREPARATIONS

CUMULATIVE LIST No. 2, 1967

p. 65:	<i>delete</i>	<i>insert</i>
	natrii radiochromas (⁵¹ Cr)	natrii chromas (⁵¹ Cr)
	sodium radiochromate (⁵¹ Cr)	sodium chromate (⁵¹ Cr)
	natrii radio-iodidum (¹³¹ I)	natrii iodidum (¹³¹ I)
	sodium radio-iodide (¹³¹ I)	sodium iodide (¹³¹ I)
	natrii radiophosphas (³² P)	natrii phosphas (³² P)
	sodium radiophosphate (³² P)	sodium phosphate (³² P)
p. 69:	<i>delete</i>	<i>insert</i>
	oleum radio-ethiodatum (¹³¹ I)	oleum ethiodatum (¹³¹ I)
	radio-ethiodized oil (¹³¹ I)	ethiodized (¹³¹ I) oil
p. 83:	<i>delete</i>	<i>insert</i>
	radio-aurum (¹⁹⁸ Au) colloidal	aurum (¹⁹⁸ Au) colloidal
	radio gold (¹⁹⁸ Au) colloidal	gold (¹⁹⁸ Au) colloidal
	radiocyanocobalaminum (⁶⁰ Co)	cyanocobalaminum (⁶⁰ Co)
	radiocyanocobalamin (⁶⁰ Co)	cyanocobalamin (⁶⁰ Co)
	radiomerisoprololum (¹⁹⁷ Hg)	merisoprololum (¹⁹⁷ Hg)
	radiomerisoprol (¹⁹⁷ Hg)	merisoprol (¹⁹⁷ Hg)
p. 84:	<i>delete</i>	<i>insert</i>
	radioselenomethioninum (⁷⁵ Se)	selenomethioninum (⁷⁵ Se)
	radioselenomethionine (⁷⁵ Se)	selenomethionine (⁷⁵ Se)
	radiotolpovidonum (¹³¹ I)	tolpovidonum (¹³¹ I)
	radiotolpovidone (¹³¹ I)	tolpovidone (¹³¹ I)
p. 94:	<i>delete</i>	<i>insert</i>
	triacetyloleandomycinum	troleandomycinum
	triacetyloleandomycin	troleandomycin

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 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 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.*, 1969, 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. In devising a name from the systematic chemical name of a substance, syllables such as "methylhydro", "methoxy" and "chlor" should preferably be abbreviated, for example, to "medro", "meto", and "clo"; the derived name should not be chemically misleading.

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 Substances (unpublished reports WHO/Pharm/67.443, WHO/Pharm/68.447, and WHO/Pharm/70.453)

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>	
-actidum	-actide	-actide	synthetic polypeptides with a corticotrophin-like action
-andr-	-andr-	-andr-	
or -stan-	or -stan-	or -stan-	} steroids, androgenic
or -ster-	or -ster-	or -ster-	
-arolum	-arol	-arol	anticoagulants of the coumarin type
-bamatum	-bamate	-bamate	tranquillizers of the propanediol and pentanediol series
barb	barb	barb	barbituric acids, hypnotic activity
bol	bol	bol	anabolic steroids
-cainum	-caine	-caine	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
-curium	-curium	-curium	curare-like drugs
-cyclinum	-cycline	-cycline	antibiotics, tetracycline derivatives
-estr-	-estr-	-estr-	estrogenic drugs
-forminum	-formin	-formine	guanidine oral antidiabetics
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
-moxinum	-moxin	-moxine	monoamine oxidase inhibitors
-mycinum	-mycin	-mycine	antimicrobial antibiotics, produced by <i>Streptomyces</i> strains
nifur-	nifur-	nifur-	5-nitrofurantoin 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
sulfa-	sulfa-	sulfa-	sulfonamides, used as antimicrobials
-tizidum	-tizide	-tizide	diuretics which are thiazide derivatives
-toinum	-toin	-toine	antiepileptics which are hydantoin derivatives
-verinum	-verine	-verine	spasmolytics with a papaverine-like action
-inum	-ine	-ine	alkaloids and organic bases
-onum	-one	-one	ketones
-ium	-ium	-ium	quaternary amines