

International Nonproprietary Names for Pharmaceutical Substances

In accordance with paragraph 7 of the Procedure for the Selection of Recommended International Nonproprietary Names for Pharmaceutical Substances,¹ no-

tice is hereby given that the following are selected as recommended international nonproprietary names.

The inclusion of a name in the

lists of recommended international nonproprietary names does not imply any recommendation for the use of the substance in medicine or pharmacy.

Recommended International Nonproprietary Names (Rec. INN): List 15²

<i>Recommended International Nonproprietary Name (Latin, English)</i>	<i>Chemical Name or Description and Molecular Formula</i>
acemetacinum acemetacin	1-(<i>p</i> -chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid ester with glycolic acid $C_{21}H_{16}ClNO_6$
acesulfamum acesulfame	6-methyl-1,2,3-oxathiazin-4(3 <i>H</i>)-one 2,2-dioxide $C_4H_6NO_4S$
acidum etodolicum etodolic acid	1,8-diethyl-1,3,4,9-tetrahydropyrano[3,4- <i>b</i>]indole-1-acetic acid $C_{17}H_{21}NO_3$
acidum loglicicum loglicic acid	5-acetamido-2,4,6-triiodo- <i>N</i> -[(methylcarbamoyl)methyl]isophthamic acid $C_{13}H_{12}I_3N_3O_5$
acidum iosericum ioseric acid	<i>N</i> -[2-hydroxy-1-(methylcarbamoyl)ethyl]-2,4,6-triiodo-5-(2-methoxyacetamido)isophthamic acid $C_{15}H_{16}I_3N_3O_7$
acidum iosumeticum iosumetic acid	<i>N</i> -ethyl-2',4',6'-triiodo-3'-(methylamino)succinanilic acid $C_{13}H_{15}I_3N_2O_3$
acidum iotroxicum iotroxic acid	3,3'-[oxybis(ethyleneoxymethylenecarbonylimino)]bis[2,4,6-triiodobenzoic acid] $C_{22}H_{18}I_6N_2O_9$
acidum ioxotrizoicum ioxotrizoic acid	3-acetamido-5-glycolamido-2,4,6-triiodobenzoic acid $C_{11}H_9I_3N_2O_5$
acidum pipemidicum pipemidic acid	8-ethyl-5,8-dihydro-5-oxo-2-(1-piperazinyl)pyrido[2,3- <i>d'</i>]pyrimidine-6-carboxylic acid $C_{14}H_{17}N_5O_3$
acidum xanoxicum xanoxic acid	7-isopropoxy-9-oxoxanthene-2-carboxylic acid $C_{17}H_{14}O_5$
acipimoxum acipimox	5-methylpyrazinecarboxylic acid 4-oxide $C_6H_6N_2O_3$

¹ *Off. Rec. Wild Hlth Org.*, 1955, 60, 3 (Resolution EB15.R7); 1969, 173, 10 (Resolution EB43.R9).

² Other lists of recommended international

nonproprietary names can be found 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; 1970, 24, 526; 1971, 25, 476; 1972, 26, 476; 1973, 27, 453; Supplement to *WHO Chronicle*, 1974, Vol. 28, No. 10.

actodiginum actodigin	3 β -(β -D-glucopyranosyloxy)-14,23-dihydroxy-24-nor-5 β ,14 β -chol-20(22)- en-21-oic acid γ -lactone C ₂₉ H ₄₄ O ₉
ambroxolum ambroxol	<i>trans</i> -4-[(2-amino-3,5-dibromobenzyl)amino]cyclohexanol C ₁₃ H ₁₈ Br ₂ N ₂ O
amcinonidum amcinonide	9-fluoro-11 β ,16 α ,17,21-tetrahydroxypregna-1,4-diene-3,20-dione cyclic 16,17-acetal with cyclopentanone, 21-acetate C ₂₈ H ₃₅ FO ₇
azanatorum azanator	5-(1-methyl-4-piperidylidene)-5 <i>H</i> -[1]benzopyrano[2,3- <i>b</i>]pyridine C ₁₈ H ₁₆ N ₂ O
azoliminum azolimine	2-imino-3-methyl-1-phenyl-4-imidazolidinone C ₁₀ H ₁₁ N ₃ O
bacampicillinum bacampicillin	(2 <i>S</i> ,5 <i>R</i> ,6 <i>R</i>)-6-[(<i>R</i>)-(2-amino-2-phenylacetamido)]-3,3-dimethyl-7-oxo-4- thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid ester with ethyl 1-hydroxyethyl carbonate C ₂₁ H ₂₇ N ₃ O ₇ S
bentazepamum bentazepam	1,3,6,7,8,9-hexahydro-5-phenyl-2 <i>H</i> -[1]benzothieno[2,3- <i>e</i>]-1,4-diazepin- 2-one C ₁₇ H ₁₆ N ₂ OS
bifluranolum bifluranol	<i>erythro</i> -4,4'-(1-ethyl-2-methylethylene)bis[2-fluorophenol] C ₁₇ H ₁₈ F ₂ O ₂
bisfenazonum bisfenazone	3-[[[(2,3-dimethyl-5-oxo-1-phenyl-3-pyrazolin-4-yl)amino]methyl]-4- isopropyl-2-methyl-1-phenyl-3-pyrazolin-5-one C ₂₅ H ₂₉ N ₅ O ₂
botiacrinum botiacrine	<i>S</i> -[2-(dimethylamino)ethyl] 9,9-dimethyl-10-acridancarbothioate C ₂₀ H ₂₄ N ₂ OS
brindoximum brindoxime	2-[[[(6,8-dibromo-9 <i>H</i> -indeno[2,1- <i>d'</i>]pyrimidin-9-ylidene)amino]oxy]- <i>N</i> - [2-(dimethylamino)ethyl]propionamide C ₁₈ H ₁₉ Br ₂ N ₅ O ₂
bromperidolum bromperidol	4-[4-(<i>p</i> -bromophenyl)-4-hydroxypiperidino]-4'-fluorobutyrophenone C ₂₁ H ₂₃ BrFO ₂
budralazinum budralazine	4-methyl-3-penten-2-one (1-phthalazinyl)hydrazone C ₁₄ H ₁₆ N ₄
buflomedilum buflomedil	2',4',6'-trimethoxy-4-(1-pyrrolidinyl)butyrophenone C ₁₇ H ₂₅ NO ₄
butanixinum butanixin	2-(<i>p</i> -butylanilino)nicotinic acid C ₁₆ H ₁₈ N ₂ O ₂
butibufenum butibufen	2-(<i>p</i> -isobutylphenyl)butyric acid C ₁₄ H ₂₀ O ₂
carboquonum carboquone	2,5-bis(1-aziridinyl)-3-(2-hydroxy-1-methoxyethyl)-6-methyl- <i>p</i> - benzoquinone carbamate (ester) C ₁₅ H ₁₉ N ₃ O ₅
cartazolatum cartazolate	ethyl 4-(butylamino)-1-ethyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i>]pyridine-5-carboxylate C ₁₅ H ₂₂ N ₄ O ₂
ciclafrinum ciclafrine	<i>m</i> -1-oxa-4-azaspiro[4,6]undec-2-ylphenol C ₁₅ H ₂₁ NO ₂
ciclonicatum ciclonicate	<i>trans</i> -3,3,5-trimethylcyclohexyl nicotinate C ₁₅ H ₂₁ NO ₂
cicloprofenum cicloprofen	α -methylfluorene-2-acetic acid C ₁₆ H ₁₄ O ₂

cicloxololum cicloxolone	3 β -hydroxy-11-oxoolean-12-en-30-oic acid hydrogen <i>cis</i> -1,2-cyclohexanedi-carboxylate C ₃₈ H ₅₆ O ₇
cimetidinum cimetidine	1-cyano-2-methyl-3-[2-[[5-methylimidazol-4-yl)methyl]thio]ethyl)-guanidine C ₁₀ H ₁₆ N ₆ S
cinoxacinum cinoxacin	1-ethyl-1,4-dihydro-4-oxo[1,3]dioxolo[4,5- <i>g</i>]cinnoline-3-carboxylic acid C ₁₂ H ₁₀ N ₂ O ₅
cinoxololum cinoxolone	cinnamyl 3 β -hydroxy-11-oxoolean-12-en-30-oate acetate C ₄₁ H ₅₆ O ₅
clazolimimum clazolimime	1-(<i>p</i> -chlorophenyl)-2-imino-3-methyl-4-imidazolidinone C ₁₀ H ₁₀ ClN ₃ O
clebopridum clebopride	4-amino- <i>N</i> -(1-benzyl-4-piperidyl)-5-chloro- <i>o</i> -anisamide C ₂₀ H ₂₄ ClN ₃ O ₂
climiqualinum climiqualine	3-chloro-1-imidazol-1-yl-4-phenylisoquinoline C ₁₈ H ₁₂ ClN ₃
cliprofenum cliprofen	3-chloro-4-(2-thenoyl)hydratropic acid C ₁₄ H ₁₁ ClO ₃ S
clopimozidum clopimozide	1-[1-[4,4-bis(<i>p</i> -fluorophenyl)butyl]-4-piperidyl]-5-chloro-2-benzimidazo-linone C ₂₈ H ₂₈ ClF ₂ N ₃ O
cloprostenolum cloprostenol	($\pm$)-(Z)-7-[(1 <i>R</i> *,2 <i>R</i> *,3 <i>R</i> *,5 <i>S</i> *)-2-[(<i>E</i>)-(3 <i>R</i> *)-4-(<i>m</i> -chlorophenoxy)-3-hydroxy-1-butanyl]-3,5-dihydroxycyclopentyl]-5-heptenoic acid C ₂₂ H ₂₉ ClO ₆
colimecycinum colimecycine	reaction product of one molecule of colistin with three molecules of oxytetra-cycline in presence of formaldehyde <i>N,N',N''</i> -tris[4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxa-mido]methyl]polymyxin E (nominal) C ₁₂₂ H ₁₇₂ N ₂₂ O ₄₀ (nominal)
deprostilum deprostil	(1 <i>R</i> ,2 <i>S</i>)-2-(3-hydroxy-3-methyloctyl)-5-oxocyclopentaneheptanoic acid C ₂₁ H ₃₈ O ₄
desmopressinum desmopressin	1-(3-mercaptopropionic acid)-8-D-argininevasopressin C ₄₆ H ₆₄ N ₁₄ O ₁₂ S ₂
dexclamolum dexclamol	(+)-2,3,4,4a β ,8,9,13ba,14-octahydro-3a-isopropyl-1 <i>H</i> -benzo[6,7]cyclohepta-[1,2,3- <i>de</i>]pyrido[2,1- <i>a</i>]isoquinolin-3-ol C ₂₄ H ₂₉ NO
deximafenum deximafen	(+)-2,3,5,6-tetrahydro-5-phenyl-1 <i>H</i> -imidazo[1,2- <i>a</i>]imidazole C ₁₁ H ₁₃ N ₃
dextranomerum dextranomer	dextran reaction product with epichlorohydrin
dibekacinum dibekacin	O-3-amino-3-deoxy- α -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-[2,6-diamino-2,3,4,6-tetradecy- α -D- <i>erythro</i> -hexopyranosyl-(1 $\rightarrow$ 6)]-2-deoxy-L-streptamine C ₁₈ H ₃₇ N ₅ O ₈
dibuprolum dibuprol	1,3-dibutoxy-2-propanol C ₁₁ H ₂₄ O ₃
difenoximidum difenoximide	<i>N</i> -[[1-(3-cyano-3,3-diphenylpropyl)-4-phenylisonipecotoyl]oxy]succinimide C ₃₂ H ₃₁ N ₃ O ₄

diflunisalum diflunisal	2',4'-difluoro-4-hydroxy-3-biphenylcarboxylic acid C ₁₃ H ₈ F ₂ O ₃
dilimefonum dilimefone	2',4'-dimethoxy-3-(4-pyridyl)acrylophenone C ₁₆ H ₁₅ NO ₃
diproleandomycinum diproleandomycin	oleandomycin 4',11-dipropionate C ₄₁ H ₆₉ NO ₁₄
droclidinii bromidum droclidinium bromide	3-hydroxy-1-methylquinuclidinium bromide α-phenylcyclohexaneglycolate C ₂₂ H ₃₂ BrNO ₃
enbucrilatum enbucrilate	butyl 2-cyanoacrylate C ₈ H ₁₁ NO ₂
etazolatium etazolate	ethyl 1-ethyl-4-(isopropylidenehydrazino)-1 <i>H</i> -pyrazolo[3,4- <i>b</i>]pyridine-5-carboxylate C ₁₄ H ₁₉ N ₅ O ₂
eterobarbium eterobarb	5-ethyl-1,3-bis(methoxymethyl)-5-phenylbarbituric acid C ₁₆ H ₂₀ N ₂ O ₅
exaprololum exaprolol	1-(<i>o</i> -cyclohexylphenoxy)-3-(isopropylamino)-2-propanol C ₁₈ H ₂₉ NO ₂
fazadinii bromidum fazadinium bromide	1,1'-azobis[3-methyl-2-phenyl-1 <i>H</i> -imidazo[1,2- <i>a</i>]pyridin-4-ium] dibromide C ₂₆ H ₂₄ Br ₂ N ₆
febuprolum febuprol	1-butoxy-3-phenoxy-2-propanol C ₁₃ H ₂₀ O ₃
fencloracum fenclorac	chloro(3-chloro-4-cyclohexylphenyl)acetic acid C ₁₄ H ₁₆ Cl ₂ O ₂
fenperatum fenperate	2-piperidinoethyl α-benzyl-α-hydroxyhydrocinnamate acetate (ester) C ₂₅ H ₃₁ NO ₄
fentiazacum fentiazac	4-(<i>p</i> -chlorophenyl)-2-phenyl-5-thiazoleacetic acid C ₁₇ H ₁₂ ClNO ₂ S
fludazonii chloridum fludazonium chloride	1-[2,4-dichloro-β-[(2,4-dichlorobenzyl)oxy]phenethyl]-3-(<i>p</i> -fluoro-phenacyl)imidazolium chloride C ₂₆ H ₂₀ Cl ₅ FN ₂ O ₂
flumizolum flumizole	4,5-bis(<i>p</i> -methoxyphenyl)-2-(trifluoromethyl)imidazole C ₁₈ H ₁₅ F ₃ N ₂ O ₂
fluprostenolum fluprostenol	(±)-(Z)-7-[(1 <i>R</i> *,2 <i>R</i> *,3 <i>R</i> *,5 <i>S</i> *)-3,5-dihydroxy-2-[(<i>E</i>)-(3 <i>R</i> *)-3-hydroxy-4-[(α,α,α-trifluoro- <i>m</i> -tolyl)oxy]-1-butenyl]cyclopentyl]-5-heptenoic acid C ₂₃ H ₂₉ F ₃ O ₆
flutamidum flutamide	α,α,α-trifluoro-2-methyl-4'-nitro- <i>m</i> -propionotoluidide C ₁₁ H ₁₁ F ₃ N ₂ O ₃
flutazolamum flutazolam	10-chloro-11b-(<i>p</i> -fluorophenyl)-2,3,7,11b-tetrahydro-7-(2-hydroxyethyl)-oxazolo[3,2- <i>d'</i>][1,4]benzodiazepin-6(5 <i>H</i>)-one C ₁₉ H ₁₈ ClFN ₂ O ₃
ftaxilidum ftaxilide	2',6'-dimethylphthalanilic acid C ₁₆ H ₁₅ NO ₃
gallii (⁶⁷ Ga) citras gallium (⁶⁷ Ga) citrate	gallium - ⁶⁷ Ga citrate (1:1)
galosemidum galosemide	<i>N</i> -[4-(α,α,α-trifluoro- <i>m</i> -toluidino)-3-pyridyl]sulfonylpropionamide C ₁₅ H ₁₄ F ₃ N ₃ O ₃ S
gliamilidum gliamilide	<i>endo</i> -1-[4-[2-(2-methoxynicotinamido)ethyl]piperidino]sulfonyl-3-(5-norbornen-2-ylmethyl)urea C ₂₃ H ₃₃ N ₅ O ₅ S

gliflumidum gliflumide	(-)-(S)-N-(5-fluoro-2-methoxy- α -methylbenzyl)-2-[p-[(5-isobutyl-2-pyrimidinyl)sulfamoyl]phenyl]acetamide C ₂₅ H ₂₉ FN ₄ O ₄ S
glucametacinum glucametacin	2-[2-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindol-3-yl]acetamido]-2-deoxy-D-glucose C ₂₅ H ₂₇ ClN ₂ O ₆
gonadorelinum gonadorelin	luteinizing hormone-releasing factor (pig); 5-oxo-L-prolyl-L-histidyl-L-tryptophyl-L-seryl-L-tyrosylglycyl-L-leucyl-L-arginyl-L-prolylglycinamide C ₅₅ H ₇₅ N ₁₇ O ₁₃
guabenxanum guabenxan	(1,4-benzodioxan-6-ylmethyl)guanidine C ₁₀ H ₁₃ N ₃ O ₂
halofuginonum halofuginone	($\pm$)-trans-7-bromo-6-chloro-3-[3-(3-hydroxy-2-piperidyl)acetyl]-4(3H)-quinazolinone C ₁₆ H ₁₇ BrClN ₃ O ₃
indoprofenum indoprofen	p-(1-oxo-2-isoindolinyl)hydratropic acid C ₁₇ H ₁₅ NO ₃
inicaroneum inicarone	2-isopropyl-3-benzofuranyl 4-pyridyl ketone C ₁₇ H ₁₅ NO ₂
ketocainolum ketocainol	α -[2-(diisopropylamino)ethoxy]- α -propylbenzyl alcohol C ₁₈ H ₃₁ NO ₂
lergotrilum lergotrile	2-chloro-6-methylergoline-8 β -acetonitrile C ₁₇ H ₁₈ ClN ₃
levomenolum levomenol	(-)-6-methyl-2-(4-methyl-3-cyclohexen-1-yl)-5-hepten-2-ol C ₁₅ H ₂₆ O
libecillidum libecillide	2-[[[(5-carboxy-5-formamidopentyl)carbamoyl](2-phenylacetamido)-methyl]-5,5-dimethyl-4-thiazolidinecarboxylic acid C ₂₃ H ₃₂ N ₄ O ₇ S
lividomycinum lividomycin	lividomycin A: 2-O-2-amino-2,3-dideoxy- α -D-ribo-hexopyranosyl-(1 $\rightarrow$ 4)-O-[O- α -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-2,6-diamino-2,6-dideoxy- β -D-ido-pyranosyl (1 $\rightarrow$ 3)- β -D-ribofuranosyl-(1 $\rightarrow$ 5)]-2-deoxy-D-streptamine C ₂₉ H ₅₅ N ₅ O ₁₈
lofexidinum lofexidine	2-[1-(2,6-dichlorophenoxy)ethyl]-2-imidazoline C ₁₁ H ₁₂ Cl ₂ N ₂ O
macrosalbum (**mTc) macrosalb (**mTc)	technetium- ^{99m} Tc labelled macroaggregated human serum albumin
maridomycinum maridomycin	10-(formylmethyl)-7,13-dihydroxy-8-methoxy-3,12-dimethyl-5-oxo-4,17-dioxabicyclo[14.1.0] heptadec-14-en-9-yl 3,6-dideoxy-4-O-(2,6-dideoxy-3-C-methyl- α -L-ribo-hexopyranosyl)-3-(dimethylamino)- β -D-glucopyranoside 4',7'-dipropionate (ester) C ₄₁ H ₆₇ NO ₁₆
mazindolum mazindol	5-(p-chlorophenyl)-2,5-dihydro-3H-imidazo[2,1-a]isoindol-5-ol C ₁₆ H ₁₃ ClN ₂ O
mazipredonum mazipredone	11 β ,17-dihydroxy-21-(4-methyl-1-piperazinyl)pregna-1,4-diene-3,20-dione C ₂₆ H ₃₈ N ₂ O ₄
mebenosidum mebenoside	methyl 3,5,6-tri-O-benzyl-D-glucofuranoside C ₂₈ H ₃₂ O ₆
mecillinamum mecillinam	(2S,5R,6R)-6-[[[hexahydro-1H-azepin-1-yl]methylene]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid C ₁₅ H ₂₃ N ₃ O ₃ S
medifoxaminum medifoxamine	(dimethylamino)acetaldehyde diphenyl acetal C ₁₆ H ₁₉ NO ₂

mefloquinum mefloquine	DL- <i>erythro</i> - α -2-piperidyl-2,8-bis(trifluoromethyl)-4-quinolinemethanol C ₁₇ H ₁₆ F ₆ N ₂ O
melizamum melizame	<i>m</i> -(1 <i>H</i> -tetrazol-5-yloxy)phenol C ₇ H ₅ N ₄ O ₂
metogestum metogest	17 β -hydroxy-16,16-dimethylestr-4-en-3-one C ₂₀ H ₃₀ O ₂
metoxepinum metoxepin	1-(8-methoxydibenz[<i>b,f</i>]oxepin-10-yl)-4-methylpiperazine C ₂₀ H ₂₂ N ₂ O ₂
metrafazolinum metrafazoline	2-[(1,2,3,4-tetrahydro-7-methyl-1,4-ethanonaphthalen-6-yl)methyl]-2-imidazoline C ₁₇ H ₂₂ N ₂
mexoprofenum mexoprofen	<i>p</i> -(<i>trans</i> -2-methylcyclohexyl)hydratropic acid C ₁₆ H ₂₂ O ₂
mexrenoatum kalicum mexrenoate potassium	7-methyl 21-potassium 17-hydroxy-3-oxo-17 α -pregn-4-ene-7 α ,21-dicarboxylate dihydrate C ₂₄ H ₃₃ KO ₆ ·2H ₂ O
midodrinum midodrine	2-amino- <i>N</i> -(2,5-dimethoxy- β -hydroxyphenethyl)acetamide C ₁₂ H ₁₈ N ₂ O ₄
morocromenum morocromen	4-methyl-7-(4-morpholinecarboxamido)-3-(2-morpholinoethyl)coumarin C ₂₁ H ₂₇ N ₃ O ₅
moxnidazolium moxnidazole	3-[[[1-methyl-5-nitroimidazol-2-yl)methylene]amino]-5-(morpholinomethyl)-2-oxazolidinone C ₁₃ H ₁₈ N ₆ O ₅
nilestriolum nilestriol	3-(cyclopentyloxy)-19-nor-17 α -pregna-1,3,5(10)-trien-20-yne-16 α ,17-diol C ₂₅ H ₃₂ O ₃
niometacinum niometacin	5-methoxy-2-methyl-1-nicotinoylindole-3-acetic acid C ₁₈ H ₁₆ N ₂ O ₄
nitramisolum nitramisole	($\pm$)-2,3,5,6-tetrahydro-6-(<i>m</i> -nitrophenyl)imidazo[2,1- <i>b</i>]thiazole C ₁₁ H ₁₁ N ₃ O ₂ S
nitromifenum nitromifene	1-[2-[<i>p</i> -(α -(<i>p</i> -methoxyphenyl)- β -nitrostyryl)phenoxy]ethyl]pyrrolidine C ₂₇ H ₂₈ N ₂ O ₄
nitroscanatum nitroscanate	<i>p</i> -(<i>p</i> -nitrophenoxy)phenyl isothiocyanate C ₁₃ H ₈ N ₂ O ₃ S
nordinonum nordinone	11 α -hydroxy-17,17-dimethyl-18-norandrosta-4,13-dien-3-one C ₂₆ H ₂₆ O ₂
norgestometum norgestomet	17-hydroxy-11 β -methyl-19-norpregn-4-ene-3,20-dione acetate C ₂₃ H ₃₂ O ₄
octopaminum octopamine	α -(aminomethyl)- <i>p</i> -hydroxybenzyl alcohol C ₈ H ₁₁ NO ₂
octriptylinum octriptyline	1 <i>a</i> ,10 <i>b</i> -dihydro- <i>N</i> -methyldibenzo[<i>a,e</i>]cyclopropano[cycloheptene- $\Delta^{6(11),7}$ -propylamine C ₂₀ H ₂₁ N
oxetacillinum oxetacillin	(2 <i>S</i> ,5 <i>R</i> ,6 <i>R</i>)-6-[(<i>R</i>)-[4-(<i>p</i> -hydroxyphenyl)-2,2-dimethyl-5-oxo-1-imidazolidinyl]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid C ₁₉ H ₂₃ N ₂ O ₅ S
oxiramidum oxiramide	<i>N</i> -[4-(2,6-dimethylpiperidino)butyl]-2-phenoxy-2-phenylacetamide C ₂₅ H ₃₄ N ₂ O ₂
parsalmidum parsalimide	5-amino- <i>N</i> -butyl-2-(2-propynyloxy)benzamide C ₁₂ H ₁₈ N ₂ O ₂

pinaverii bromidum pinaverium bromide	4-(6-bromoveratryl)-4-[2-[2-(6,6-dimethyl-2-norpinyloxy)ethyl]-morpholinium bromide C ₂₆ H ₄₁ BrN ₂ O ₄
pinazepamum pinazepam	7-chloro-1,3-dihydro-5-phenyl-1-(2-propynyl)-2H-1,4-benzodiazepin-2-one C ₁₈ H ₁₃ ClN ₂ O
pindololum pindolol	1-(indol-4-yloxy)-3-(isopropylamino)-2-propanol C ₁₄ H ₂₀ N ₂ O ₂
pinolcainum pinolcaine	D-(+)-1-methyl-1-(1-methyl-2-piperidyl)ethyl diphenylacetate C ₂₃ H ₂₉ N ₂ O ₂
pipoctanonum pipoctanone	4'-octyl-3-piperidinopropiophenone C ₂₂ H ₃₅ NO
pipoxizinium pipoxizine	2-[2-[2-[4-(diphenylmethylene)piperidino]ethoxy]ethoxy]ethanol C ₂₄ H ₃₁ N ₂ O ₃
pirandaminum pirandamine	1,3,4,9-tetrahydro-N,N,1-trimethylindeno[2,1-c]pyran-1-ethylamine C ₁₇ H ₂₃ NO
piretanidum piretanide	4-phenoxy-3-(1-pyrrolidinyl)-5-sulfamoylbenzoic acid C ₁₇ H ₁₈ N ₂ O ₅ S
pirfenidonum pirfenidone	5-methyl-1-phenyl-2(1H)-pyridone C ₁₂ H ₁₁ NO
pirinidazolium pirinidazole	2-[[[1-methyl-5-nitroimidazol-2-yl)methyl]thio]pyridine C ₁₀ H ₁₀ N ₄ O ₂ S
pirolazamidum pirolazamide	hexahydro- α,α -diphenylpyrrolo[1,2-a]pyrazine-2(1H)-butyramide C ₂₃ H ₂₉ N ₃ O
piroxicamum piroxicam	4-hydroxy-2-methyl-N-2-pyridyl-2H-1,2-benzothiazine-3-carboxamide 1,1-dioxide C ₁₅ H ₁₃ N ₃ O ₄ S
pirozadilum pirozadil	2,6-pyridinediyl dimethylene bis(3,4,5-trimethoxybenzoate) C ₂₇ H ₂₉ NO ₁₀
pirprofenum pirprofen	3-chloro-4-(3-pyrrolin-1-yl)hydratropic acid C ₁₃ H ₁₄ ClNO ₂
pivmecillinamum pivmecillinam	hydroxymethyl (2S,5R,6R)-6-[[[hexahydro-1H-azepin-1-yl)methylene]-amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate pivalate (ester) C ₂₁ H ₃₃ N ₃ O ₅ S
polidexidum polidexide	dextran 2-(diethylamino)ethyl 2-[[2-(diethylamino)ethyl]diethylammonio]-ethyl ether chloride, hydrochloride, epichlorohydrin crosslinked
pranolii chloridum pranolium chloride	[2-hydroxy-3-(1-naphthylloxy)propyl]isopropyl dimethylammonium chloride C ₁₈ H ₂₆ ClNO ₂
praxadinum praxadine	pyrazole-1-carboximidine C ₄ H ₆ N ₄
pribecainum pribecaine	3-piperidinopropyl m-anisate C ₁₆ H ₂₃ NO ₃
profexalonum profexalone	2-oxo-5-phenyl-N-propyl-3-oxazolidinecarboxamide C ₁₃ H ₁₆ N ₂ O ₃
proquazonum proquazone	1-isopropyl-7-methyl-4-phenyl-2(1H)-quinazolinone C ₁₆ H ₁₈ N ₂ O
prorenoatum kalicum prorenoate potassium	potassium 6,7-dihydro-17-hydroxy-3-oxo-3'H-cyclopropa[6,7]-17 α -pregna-4,6-diene-21-carboxylate C ₂₃ H ₃₁ KO ₄

proxibarbalum proxibarbal	5-allyl-5-(2-hydroxypropyl)barbituric acid $C_{10}H_{14}N_2O_4$
quinupraminum quinupramine	10,11-dihydro-5-(3-quinuclidinyl)-5H-dibenz[<i>b,f</i>]azepine $C_{21}H_{24}N_2$
razoxanum razoxane	4,4'-propylenedi-2,6-piperazinedione $C_{11}H_{16}N_4O_4$
ripazepamum ripazepam	1-ethyl-4,6-dihydro-3-methyl-8-phenylpyrazolo[4,3- <i>e</i>][1,4]diazepin-5(1 <i>H</i>)-one $C_{15}H_{16}N_4O$
ritropirronii bromidum ritropirronium bromide	<i>erythro</i> -3-hydroxy-1,1-dimethylpyrrolidinium bromide α -cyclopentylmandelate $C_{19}H_{28}BrNO_3$
ritrosulfanum ritrosulfan	1,4-dideoxy-1,4-bis[(2-hydroxyethyl)amino]erythritol 1,4-dimethanesulfonate (ester) $C_{10}H_{24}N_2O_8S_2$
rociverinum rociverine	2-(diethylamino)-1-methylethyl <i>cis</i> -1-hydroxy[bicyclohexyl]-2-carboxylate $C_{20}H_{37}NO_3$
roxolonii metilsulfas roxolonium metilsulfate	2-(hydroxymethyl)-1,1-dimethylpyrrolidinium methyl sulfate 3 β -hydroxy-11-oxoolean-12-en-30-oate $C_{38}H_{63}NO_8S$
sincalidum sincalide	L-aspartyl-L-tyrosyl-L-methionylglycyl-L-tryptophyl-L-methionyl-L-aspartylphenyl-L-alaninamide hydrogen sulfate (ester) or 1-de(5-oxo-L-proline)-2-de-L-glutamine-5-L-methioninecaerulein $C_{49}H_{62}N_{10}O_{16}S_3$
sitofibratum sitofibrate	stigmast-5-en-3 β -ol 2-(<i>p</i> -chlorophenoxy)-2-methylpropionate $C_{39}H_{59}ClO_3$
sorbinicatum sorbinicate	D-glucitol hexanicotinate $C_{42}H_{32}N_6O_{12}$
spiroxepinum spiroxepin	<i>N,N</i> -dimethylspiro[dibenz[<i>b,e</i>]oxepin-11(6 <i>H</i>),2'-[1,3]dioxolane]-4'-methylamine $C_{19}H_{21}NO_3$
stilonii iodidum stilonium iodide	triethyl[2-(<i>p</i> -styrylphenoxy)ethyl]ammonium iodide $C_{22}H_{30}INO$
stiripentolum stiripentol	4,4-dimethyl-1-[(3,4-methylenedioxy)phenyl]-1-penten-3-ol $C_{14}H_{18}O_3$
streptozocinum streptozocin	2-deoxy-2-(3-methyl-3-nitrosoureido)-D-glucopyranose $C_8H_{15}N_3O_7$
sulindacum sulindac	(<i>Z</i>)-5-fluoro-2-methyl-1-[<i>p</i> -(methylsulfinyl)benzylidene]indene-3-acetic acid $C_{20}H_{17}FO_3S$
sulnidazolum sulnidazole	<i>O</i> -methyl [2-(2-ethyl-5-nitroimidazol-1-yl)ethyl]thiocarbamate $C_9H_{14}N_4O_3S$
taleranolium taleranol	(3 <i>S</i> ,7 <i>S</i>)-3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-1 <i>H</i> -2-benzoxacyclotetradecin-1-one $C_{18}H_{26}O_5$
teflutixolium teflutixol	4-[3-[6-fluoro-2-(trifluoromethyl)thioxanthen-9-yl]propyl]-1-piperazineethanol $C_{29}H_{26}F_4N_2OS$

terbuprolum terbuprol	1- <i>tert</i> -butoxy-3-methoxy-2-propanol C ₈ H ₁₈ O ₃
terfenadinum terfenadine	α -(<i>p</i> - <i>tert</i> -butylphenyl)-4-(hydroxydiphenylmethyl)-1-piperidinebutanol C ₃₂ H ₄₁ NO ₂
terofenamatum terofenamate	ethoxymethyl <i>N</i> -(2,6-dichloro- <i>m</i> -tolyl)anthranilate C ₁₇ H ₁₇ Cl ₂ NO ₃
tetroxoprium tetroxoprim	2,4-diamino-5-[3,5-dimethoxy-4-(2-methoxyethoxy)benzyl]pyrimidine C ₁₆ H ₂₂ N ₄ O ₄
tiafibratum tiafibrate	2-(<i>p</i> -chlorophenoxy)-2-methylpropionic acid diester with 2,2'-(decamethylene)dithio)diethanol C ₃₄ H ₄₈ Cl ₂ O ₆ S ₂
tibezonii iodidum tibezonium iodide	diethylmethyl [2-[[4-(<i>p</i> -(phenylthio)phenyl)-3 <i>H</i> -1,5-benzodiazepin-2-yl]thio]ethyl]ammonium iodide C ₂₈ H ₃₂ IN ₃ S ₂
tidiacicum tidiacic	2,4-thiazolidinedicarboxylic acid C ₅ H ₇ NO ₄ S
tifemoxonum tifemoxone	tetrahydro-6-(phenoxyethyl)-2 <i>H</i> -1,3-oxazine-2-thione C ₁₁ H ₁₃ NO ₂ S
timonacicum timonacic	4-thiazolidinecarboxylic acid C ₄ H ₇ NO ₂ S
tinofedrinum tinofedrine	α -[1-[(3,3-di-3-thienylallyl)amino]ethyl]benzyl alcohol C ₂₀ H ₂₁ NOS ₂
tiopramidum tiopramide	D,L- α -benzamido- <i>p</i> -[2-(diethylamino)ethoxy]- <i>N,N</i> -dipropylhydrocinnamamide C ₂₈ H ₄₁ N ₃ O ₃
tobramycinum tobramycin	an antibiotic obtained from cultures of <i>Streptomyces tenebrarius</i> or the same substance obtained by any other means; <i>O</i> -3-amino-3-deoxy- α -D-glucopyranosyl-(1 $\rightarrow$ 4)- <i>O</i> -[2,6-diamino-2,3,6-trideoxy- α -D-ribohexopyranosyl-(1 $\rightarrow$ 6)]-2-deoxystreptamine C ₁₈ H ₃₇ N ₅ O ₉
tocofibratum tocofibrate	2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-chromanyl 2-(<i>p</i> -chlorophenoxy)-2-methylpropionate C ₃₉ H ₅₉ ClO ₄
tolciciatum tolciclate	<i>O</i> -(1,2,3,4-tetrahydro-1,4-methanonaphthalen-6-yl) <i>m,N</i> -dimethylthiocarbamate C ₂₀ H ₂₁ NO ₃
trifluomeprazinum trifluomeprazine	10-[3-(dimethylamino)-2-methylpropyl]-2-(trifluoromethyl)phenothiazine C ₁₉ H ₂₁ F ₃ N ₂ S
xantocillinum xantocillin	an antibiotic obtained from cultures of <i>Penicillium notatum</i> or the same substance produced by any other means
zeranolum zeranol	(3 <i>S</i> ,7 <i>R</i>)-3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-1 <i>H</i> -2-benzoxacyclotetradecin-1-one C ₁₈ H ₂₆ O ₅
zilantelum zilantel	phosphonodithioimidocarbonic acid ethylene dibenzyl <i>P,P,P',P'</i> -tetraethyl ester C ₂₆ H ₃₈ N ₂ O ₆ P ₂ S ₄

AMENDMENTS TO PREVIOUS LISTS

Vol. 13, No. 12

Recommended International Nonproprietary Names (Rec. INN): List 3

p. 472 *delete the following entry*

sorbimacrogoli oleas 100
sorbimacrogol oleate 100

insert

polysorbatum
polysorbate

p. 473 *delete the following entry*

sorbimacrogoli oleas 300
sorbimacrogol oleate 300

polyoxyethylene derivative of cyclic sorbital
anhydrides partially esterified with a fatty acid.

The numbered polysorbates indicated below refer to the following compounds: e.g.

polysorbate 20: polyoxyethylene 20 sorbitan* monolaurate $C_{58}H_{114}O_{26}$ (nominal)

polysorbate 40: polyoxyethylene 20 sorbitan* monopalmitate $C_{62}H_{122}O_{28}$ (nominal)

polysorbate 60: polyoxyethylene 20 sorbitan* monostearate $C_{64}H_{126}O_{28}$ (nominal)

polysorbate 65: polyoxyethylene 20 sorbitan* tristearate $C_{100}H_{194}O_{28}$ (nominal)

polysorbate 80: polyoxyethylene 20 sorbitan* mono-oleate $C_{64}H_{124}O_{26}$ (nominal)

polysorbate 85: polyoxyethylene 20 sorbitan* trioleate $C_{100}H_{198}O_{28}$ (nominal)

* polyoxyethylene 20 sorbitan corresponds to tris(polyethylene glycol 300) sorbitan ethers

Vol. 19, No. 6

Recommended International Nonproprietary Names (Rec. INN): List 5

p. 253 rufocromomycinum
rufocromomycin

replace the present definition by the following:

antibiotic obtained from cultures of *Streptomyces rufochromogenus* or *Streptomyces flocculus*, or the same substance produced by any other means
5-amino-6-(7-amino-5,8-dihydro-6-methoxy-5,8-dioxo-2-quinolyl)-4-(2-hydroxy-3,4-dimethoxyphenyl)-3-methylpicolinic acid
 $C_{25}H_{22}N_4O_8$

Vol. 22, No. 10

Recommended International Nonproprietary Names (Rec. INN): List 8

p. 64 *delete*

cisclofenum
cisclofene

2-[p-(2-chloro-*cis*-1,2-diphenylvinyl)phenoxy]triethylamine
 $C_{26}H_{28}ClNO$

insert

enclomifenum
enclomifene

2-[p-(2-chloro-*trans*-1,2-diphenylvinyl)phenoxy]triethylamine
or (*E*)-2-[p-(2-chloro-1,2-diphenylvinyl)phenoxy]triethylamine
(previous INN: cisclofene)
 $C_{26}H_{28}ClNO$

p. 69	<i>delete</i>	
	transclomifenum	2- [<i>p</i> -(2-chloro- <i>trans</i> -1,2-diphenylvinyl)phenoxy]triethylamine
	transclomifene	C ₂₆ H ₂₈ ClNO
	<i>insert</i>	
	zuclofenum	2- [<i>p</i> -(2-chloro- <i>cis</i> -1,2-diphenylvinyl)phenoxy]triethylamine
	zuclofenone	or (<i>Z</i>)-2- [<i>p</i> -(2-chloro-1,2-diphenylvinyl)phenoxy]triethylamine (previous INN : transclomifene)
		C ₂₆ H ₂₈ ClNO

Vol. 25, No. 10

Recommended International Nonproprietary Names (Rec. INN): List 11

p. 478	<i>delete</i>	<i>insert</i>
	cloxifenolum	triclosanum
	cloxifenol	triclosan

Vol. 27, No. 10

Recommended International Nonproprietary Names (Rec. INN): List 13

p. 454	ceruletum ceruletide	<i>replace chemical name by the following :</i> 5-oxo- L-prolyl- L-glutamyl- L-aspartyl- L-tyrosyl- L-threonylglycyl- L-methionyl- L-aspartyl- L-phenylalaninamide 4- (hydrogen sulfate) (ester)
p. 457	<i>delete</i>	<i>insert</i>
	macrisalbum (¹³¹ I)	macrisalbum (¹³¹ I)
	macrisalb (¹³¹ I)	macrisalb (¹³¹ I)
p. 458	<i>delete</i>	
	oxaprazinum	10- [3- [4- (2- <i>m</i> -dioxan-2-ylethyl)-1-piperazinyl]propyl]phenothiazine
	oxaprazine	C ₂₅ H ₃₃ N ₃ O ₂ S

Supplement to Vol. 28, No. 10

Recommended International Nonproprietary Names (Rec. INN): List 14

p. 1	acidum tibricum tibric acid	<i>replace chemical name by the following :</i> 2-chloro-5- [(<i>cis</i> -3,5-dimethylpiperidino)sulfonyl]benzoic acid
p. 2	butorphanolum butorphanol	<i>replace chemical name by the following :</i> (-)-17-(cyclobutylmethyl)morphinan-3,14-diol
p. 3	<i>delete</i>	
	dexnorgestrelum dexnorgestrel	D-13-ethyl-17-hydroxy-18,19-dinor-17 α -pregn-4-en-20-yn-3-one C ₂₁ H ₂₈ O ₂
p. 7	oxilorphanum oxilorphan	<i>replace chemical name by the following :</i> (-)-17-(cyclopropylmethyl)morphinan-3,14-diol