

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 14²

<i>Recommended International Nonproprietary Name</i> (Latin, English)	<i>Chemical Name or Description and Molecular Formula</i>
acetiromatum acetiromate	4-(4-hydroxy-3-iodophenoxy)-3,5-diiodobenzoic acid acetate C ₁₅ H ₉ I ₃ O ₅
acidum mefenamicum mefenamic acid	<i>N</i> -(2,3-xylyl)anthranilic acid C ₁₅ H ₁₅ NO ₂
acidum tiaprofenicum tiaprofenic acid	5-benzoyl- α -methyl-2-thiopheneacetic acid C ₁₄ H ₁₂ O ₃ S
acidum tibricum tibric acid	2-chloro-5-[(<i>cis</i> -3,5-dimethylpiperidino)sulfonyl]benzoic acid C ₁₄ H ₁₈ ClNO ₄ S
alprazolamum alprazolam	8-chloro-1-methyl-6-phenyl-4 <i>H</i> -s-triazolo[4,3- <i>a</i>][1,4]benzodiazepine C ₁₇ H ₁₃ ClN ₄
aluminii clofibras aluminium clofibrate	bis[2-(<i>p</i> -chlorophenoxy)-2-methylpropionato]hydroxyaluminum C ₂₀ H ₂₁ AlCl ₂ O ₇
amfebutamonum amfebutamone	(\pm)-2-(<i>tert</i> -butylamino)-3'-chloropropiophenone C ₁₃ H ₁₈ ClNO
amikacinum amikacin	<i>O</i> -3-amino-3-deoxy- α -D-glucopyranosyl(1 \rightarrow 4)- <i>O</i> -[6-amino-6-deoxy- α -D-glucopyranosyl(1 \rightarrow 6)]- <i>N</i> ³ -(4-amino-L-2-hydroxybutyryl)-2-deoxy-L-streptamine C ₂₂ H ₄₃ N ₅ O ₁₃
amindocatum amindocate	2-(dimethylamino)ethyl 1-[2-(dimethylamino)ethyl]-2,3-dimethylindole-5-carboxylate C ₁₉ H ₂₉ N ₃ O ₂
amogastrinum amogastrin	<i>N</i> -carboxy-L-tryptophyl-L-methionyl-L- α -aspartyl-3-phenyl-L-alaninamide <i>N</i> - <i>tert</i> -pentyl ester C ₃₅ H ₄₆ N ₆ O ₈ S
anazocinum anazocine	9- <i>syn</i> -methoxy-3-methyl-9-phenyl-3-azabicyclo[3.3.1]nonane C ₁₆ H ₂₃ NO

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,

anidoximum anidoxime	3-(diethylamino)propiofenone <i>O</i> -[(<i>p</i> -methoxyphenyl)carbamoyl]oxime C ₂₁ H ₂₇ N ₃ O ₃
azaclozimum azaclozine	2-chloro-10-[3-(hexahydropyrrolo[1,2- <i>a</i>]pyrazin-2(1 <i>H</i>)-yl)propionyl]-phenothiazine C ₂₂ H ₂₄ ClN ₃ OS
azaftozimum azaftozine	10-[3-(hexahydropyrrolo[1,2- <i>a</i>]pyrazin-2(1 <i>H</i>)-yl)propionyl]-2-(trifluoromethyl)phenothiazine C ₂₃ H ₂₄ F ₃ N ₃ OS
bencisteinum bencisteine	<i>N</i> -acetyl-3-[(2-benzoylpropyl)thio]alanine C ₁₅ H ₁₉ NO ₄ S
benurestatum benurestat	2-(<i>p</i> -chlorobenzamido)acetohydroxamic acid C ₉ H ₉ ClN ₂ O ₃
benznidazolum benznidazole	<i>N</i> -benzyl-2-nitroimidazole-1-acetamide C ₁₂ H ₁₂ N ₄ O ₃
bisacodylum bisacodyl	4,4'-(2-pyridylmethylene)diphenol diacetate C ₂₂ H ₁₉ NO ₄
brofezilum brofezil	4-(<i>p</i> -bromophenyl)- α -methyl-2-thiazoleacetic acid C ₁₂ H ₁₀ BrNO ₂ S
brofoxinum brofoxine	6-bromo-1,4-dihydro-4,4-dimethyl-2 <i>H</i> -3,1-benzoxazin-2-one C ₁₀ H ₁₀ BrNO ₂
bromoxanidum bromoxanide	4'-bromo-3- <i>tert</i> -butyl- α' , α' , α' -trifluoro-5-nitro-2,6-cresoto- <i>o</i> -toluide C ₁₉ H ₁₈ BrF ₃ N ₂ O ₄
brotianidum brotianide	3,4'-dibromo-5-chlorothiosalicylanilide acetate (ester) C ₁₅ H ₁₀ Br ₂ ClNO ₂ S
brovanexinum brovanexine	2',4'-dibromo- α -(cyclohexylmethylamino)- <i>o</i> -vanillitoluide acetate (ester) C ₂₄ H ₂₈ Br ₂ N ₂ O ₄
broxuridinum broxuridine	5-bromo-2'-deoxyuridine C ₉ H ₁₁ BrN ₂ O ₅
bufetololum bufetolol	1-(<i>tert</i> -butylamino)-3-[α -(tetrahydrofurfuryl)oxy]phenoxy]-2-propanol C ₁₈ H ₂₉ NO ₄
bufuralolum bufuralol	α -[(<i>tert</i> -butylamino)methyl]-7-ethyl-2-benzofuranmethanol C ₁₆ H ₂₃ NO ₂
bupicomidum bupicomide	5-butyl-2-pyridinecarboxamide C ₁₀ H ₁₄ N ₂ O
buspironum buspirone	8-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-8-azaspiro[4.5]decane-7,9-dione C ₂₁ H ₃₁ N ₅ O ₂
butaclamololum butaclamol	3 α - <i>tert</i> -butyl-2,3,4,4a β ,8,9,13ba,14-octahydro-1 <i>H</i> -benzo[6,7]cyclohepta-[1,2,3- <i>de</i>]pyrido[2,1- <i>a</i>]isoquinolin-3-ol C ₂₅ H ₃₁ NO
butonatium butonate	butyric acid, ester with dimethyl(2,2,2-trichloro-1-hydroxyethyl)phosphonate C ₈ H ₁₄ Cl ₃ O ₅ P
butorphanololum butorphanol	(-)-17-(cyclobutylmethyl)morphinan-3,14-diol C ₂₁ H ₂₉ NO ₂
butropil bromidum butropium bromide	8-(<i>p</i> -butoxybenzyl)-3 α -hydroxy-1 α H,5 α H-tropanium bromide (-)-tropate C ₂₈ H ₃₈ BrNO ₄
calcitoninum calcitonin	a polypeptide hormone of ultimobranchial origin, extractable from the thyroid gland of mammalian species or the ultimobranchial gland of non-mammals, that lowers the calcium concentration in plasma of mammals; or the same substance obtained by synthesis. The source of the product should be indicated.

camazepamum camazepam	7-chloro-1,3-dihydro-3-hydroxy-1-methyl-5-phenyl-2 <i>H</i> -1,4-benzodiazepin-2-one dimethylcarbamate (ester) C ₁₉ H ₁₈ ClN ₃ O ₃
carmantadinum carmantadine	1-(1-adamantyl)-2-azetidinecarboxylic acid C ₁₄ H ₂₁ NO ₂
carmetizidum carmetizide	methyl 6-chloro-3,4-dihydro-2-methyl-7-sulfamoyl-2 <i>H</i> -1,2,4-benzothiadiazine-3-carboxylate 1,1-dioxide C ₁₀ H ₁₂ ClN ₃ O ₆ S ₂
cefamandolum cefamandole	7-D-mandelamido-3-[[[(1-methyl-1 <i>H</i> -tetrazol-5-yl)thio]methyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid C ₁₈ H ₁₈ N ₆ O ₅ S ₂
ciclobendazolum ciclobendazole	methyl 5-(cyclopropylcarbonyl)-2-benzimidazolecarbamate C ₁₃ H ₁₃ N ₃ O ₃
ciheptolanum ciheptolane	10,11-dihydro- <i>N,N</i> -dimethylspiro[5 <i>H</i> -dibenzo[<i>a,d'</i>]cycloheptene-5,2'-[1,3]dioxolane]-4'-methylamine C ₂₀ H ₂₃ NO ₂
cinocetramidum cinocetramide	octahydro-1-(3,4,5-trimethoxycinnamoyl)azocine C ₁₉ H ₂₇ NO ₄
cinpropazidum cinpropazide	<i>N</i> -isopropyl-4-(3,4,5-trimethoxycinnamoyl)-1-piperazineacetamide C ₂₁ H ₃₁ N ₃ O ₅
clocoumarolum clocoumarol	3-[<i>p</i> -(2-chloroethyl)- α -propylbenzyl]-4-hydroxycoumarin C ₂₁ H ₂₁ ClO ₃
clofeverinum clofeverine	1-[(<i>p</i> -chlorophenoxy)methyl]-1,2,3,4-tetrahydro-6,7-isoquinolinediol C ₁₆ H ₁₆ ClNO ₃
clopiracum clopirac	1-(<i>p</i> -chlorophenyl)-2,5-dimethylpyrrole-3-acetic acid C ₁₄ H ₁₄ ClNO ₂
cloprednolum cloprednol	6-chloro-11 β ,17,21-trihydroxypregna-1,4,6,-triene-3,20-dione C ₂₁ H ₂₅ ClO ₅
cloroqualonum cloroqualone	3-(2,6-dichlorophenyl)-2-ethyl-4(3 <i>H</i>)-quinazolinone C ₁₆ H ₁₂ Cl ₂ N ₂ O
clotiazepamum clotiazepam	5-(<i>o</i> -chlorophenyl)-7-ethyl-1,3-dihydro-1-methyl-2 <i>H</i> -thieno[2,3- <i>e</i>]-1,4-diazepin-2-one C ₁₆ H ₁₅ ClN ₂ OS
cloxiquinum cloxiquine	5-chloro-8-quinolinol C ₉ H ₆ ClNO
cortisuzolum cortisuzol	11 β ,17,21-trihydroxy-6,16 α -dimethyl-2'-phenyl-2' <i>H</i> -pregna-2,4,6-trieno[3,2- <i>c</i>]pyrazol-20-one 21-(<i>m</i> -sulfobenzoate) C ₃₇ H ₄₀ N ₂ O ₈ S
cuprimyxinum cuprimyxin	bis(6-methoxy-1-phenazinol 5,10-dioxidato- <i>O</i> ¹ , <i>O</i> ¹⁰)copper C ₂₆ H ₁₆ CuN ₄ O ₆
danltracenum danltracen	9,10-dihydro-10-(1-methyl-4-piperidylidene)-9-anthrol C ₂₀ H ₂₁ NO
dexamisolum dexamisole	(+)-2,3,5,6-tetrahydro-6-phenylimidazo[2,1- <i>b</i>]thiazole C ₁₁ H ₁₂ N ₂ S
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
dextilidinum dextilidine	(+)-ethyl <i>trans</i> -2-(dimethylamino)-1-phenyl-3-cyclohexene-1-carboxylate C ₁₇ H ₂₃ NO ₂

diclonixinum diclonixin	2-(2,3-dichloroanilino)nicotinic acid $C_{12}H_8Cl_2N_2O_2$
dicloralurea dicloralurea	<i>N,N'</i> -bis(2,2,2-trichloro-1-hydroxyethyl)urea $C_5H_5Cl_3N_2O_3$
diflorasonum diflorasone	6 α ,9-difluoro-11 β ,17,21-trihydroxy-16 β -methylpregna-1,4-diene-3,20-dione $C_{22}H_{28}F_2O_5$
diftalonum diftalone	phthalazino[2,3- <i>b</i>]phthalazine-5,12(7 <i>H</i> ,14 <i>H</i>)dione $C_{16}H_{12}N_2O_2$
diltiazemum diltiazem	(+)-5-[2-(dimethylamino)ethyl]- <i>cis</i> -2,3-dihydro-3-hydroxy-2-(<i>p</i> -methoxyphenyl)-1,5-benzothiazepin-4(5 <i>H</i>)-one acetate (ester) $C_{22}H_{26}N_2O_4S$
dimemorfanum dimemorfan	(+)-3,17-dimethylmorphinan $C_{18}H_{25}N$
domazolinum domazoline	2-(3,6-dimethoxy-2,4-dimethylbenzyl)-2-imidazoline $C_{14}H_{20}N_2O_2$
dopamantinum dopamantine	<i>N</i> -(3,4-dihydroxyphenethyl)-1-adamantanecarboxamide $C_{19}H_{25}NO_3$
doxenitoinum doxenitoin	5,5-diphenyl-4-imidazolidinone $C_{15}H_{14}N_2O$
dropempinum dropempine	1,2,3,6-tetrahydro-1,2,2,6,6-pentamethylpyridine $C_{10}H_{19}N$
enprazepinum enprazepine	5-[3-(dimethylamino)propyl]-5,6-dihydro-11-methylene-11 <i>H</i> -dibenz[<i>b,e</i>]azepine $C_{20}H_{24}N_2$
entsufonum entsufon	2-[2-[2-[<i>p</i> -(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethoxy]-ethanesulfonic acid $C_{20}H_{34}O_6S$
enviomycinum enviomycin	tuberactinomycin N; stereoisomer of [[15-(3,6-diamino-4-hydroxyhexanamido)-3-(hexahydro-2-imino-4-pyrimidinyl)-9,12-bis(hydroxymethyl)-2,5,8,11,14-penta-oxo-1,4,7,10,13-pentaazacyclohexadec-6-ylidene]methyl]urea $C_{25}H_{43}N_{13}O_{10}$
epitiostanolum epitiostanol	2 α ,3 α -epithio-5 α -androstane-17 β -ol $C_{19}H_{30}OS$
esproquinum esproquine	2-[3-(ethylsulfinyl)propyl]-1,2,3,4-tetrahydroisoquinoline $C_{14}H_{21}NOS$
estazolamum estazolam	8-chloro-6-phenyl-4 <i>H</i> -s-triazolo[4,3- <i>a</i>][1,4]benzodiazepine $C_{16}H_{11}ClN_4$
etiroxatum etiroxate	α -methyl-DL-thyroxine ethyl ester $C_{18}H_{17}I_4NO_4$
etofibratum etofibrate	2-hydroxyethyl nicotinate 2-(<i>p</i> -chlorophenoxy)-2-methylpropionate (ester) $C_{18}H_{18}ClNO_5$
etomidolinum etomidoline	2-ethyl-3-(β -piperidino- <i>p</i> -phenetidine)phthalimidine $C_{23}H_{29}N_3O_2$
fenacetinolum fenacetinol	<i>p</i> -glycolophenetidine $C_{10}H_{13}NO_3$
fenbufenum fenbufen	3-(4-biphenylcarbonyl)propionic acid $C_{16}H_{14}O_3$

fencibutiroolum fencibutirof	α -ethyl-1-hydroxy-4-phenylcyclohexanecarboxylic acid $C_{16}H_{22}O_3$
fenclofenacum fenclofenac	[<i>o</i> -(2,4-dichlorophenoxy)phenyl]acetic acid $C_{14}H_{10}Cl_2O_3$
fenetradilum fenetradil	1-(isobutoxymethyl)-2-(4-methyl-1-piperazinyl)ethyl 2-phenylbutyrate $C_{22}H_{36}N_2O_3$
fenpipalonum fenpipaione	5-[2-(3,6-dihydro-4-phenyl-1(2 <i>H</i>)-pyridyl)ethyl]-3-methyl-2-oxazolidinone $C_{17}H_{22}N_2O_2$
fenquizonum fenquizone	7-chloro-1,2,3,4-tetrahydro-4-oxo-2-phenyl-6-quinazolinesulfonamide $C_{14}H_{12}ClN_3O_3S$
feprazonum feprazone	4-(3-methyl-2-butenyl)-1,2-diphenyl-3,5-pyrazolidinedione $C_{20}H_{20}N_2O_2$
fibracillinum fibracillin	D-6-[2-[2-(<i>p</i> -chlorophenoxy)-2-methylpropionamido]-2-phenylacetamido]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid $C_{26}H_{28}ClN_3O_6S$
fietazepamum fietazepam	7-chloro-5-(<i>o</i> -fluorophenyl)-2,3-dihydro-1-(2,2,2-trifluoroethyl)-1 <i>H</i> -1,4-benzodiazepine $C_{17}H_{13}ClF_4N_2$
fiucetorexum fiucetorex	α -[[α -methyl- <i>m</i> -(trifluoromethyl)phenethyl]carbamoyl]- <i>p</i> -acetanilide $C_{20}H_{21}F_3N_2O_3$
fluciprazinum fluciprazine	α -[[1-(1-ethynylcyclohexyl)oxy]methyl]-4-(<i>p</i> -fluorophenyl)-1-piperazineethanol $C_{21}H_{29}FN_2O_2$
flunaminum flunamine	2-[bis(<i>p</i> -fluorophenyl)methoxy]ethylamine $C_{15}H_{15}F_2NO$
flunixinum flunixin	2-($\alpha^3, \alpha^3, \alpha^3$ -trifluoro-2,3-xylidino)nicotinic acid $C_{14}H_{11}F_3N_2O_2$
fluocortinum fluocortin	6 α -fluoro-11 β -hydroxy-16 α -methyl-3,20-dioxopregna-1,4-dien-21-oic acid $C_{22}H_{27}FO_5$
flutonidinum flutonidine	2-(5-fluoro- <i>o</i> -toluidino)-2-imidazoline $C_{10}H_{12}FN_3$
formebolonum formebolone	11 $\alpha, 17\beta$ -dihydroxy-17-methyl-3-oxoandrost-1,4-diene-2-carboxaldehyde $C_{21}H_{28}O_4$
furbucillinum furbucillin	6-[(<i>R</i>)-2-hydroxy-4-methylvaleramido]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid 2-furoate (ester) $C_{19}H_{24}N_2O_7S$
furobufenum furobufen	γ -oxo-2-dibenzofuranbutyric acid $C_{16}H_{12}O_4$
glibutiminum glibutimine	<i>N</i> -[<i>p</i> -[[3-(3-cyclohexen-1-yl)-2-imino-1-imidazolidinyl]-sulfonyl]phenethyl]butyramide $C_{21}H_{30}N_4O_3S$
guanoxabenzum guanoxabenz	1-[(2,6-dichlorobenzylidene)amino]-3-hydroxyguanidine $C_8H_6Cl_2N_4O$
halocortolonum halocortolone	9-chloro-6 $\alpha, 11\beta$ -difluoro-21-hydroxy-16 α -methylpregna-1,4-diene-3,20-dione $C_{22}H_{27}ClF_2O_3$
halonaminum halonamine	2-[[<i>p</i> -chloro- α -(<i>p</i> -fluorophenyl)benzyl]oxy]ethylamine $C_{15}H_{15}ClFN_2O$

hexaprofenum hexaprofen	<i>p</i> -cyclohexylhydratropic acid C ₁₅ H ₂₀ O ₂
ibuterolum ibuteroi	5-[2-(<i>tert</i> -butylamino)-1-hydroxyethyl]- <i>m</i> -phenylene diisobutyrate C ₂₀ H ₃₁ NO ₅
idrociilamidum idrociilamide	<i>N</i> -(2-hydroxyethyl)cinnamamide C ₁₁ H ₁₃ NO ₂
idropranololum idropranolol	1-[(5,6-dihydro-1-naphthyl)oxy]-3-(isopropylamino)-2-propanol C ₁₆ H ₂₃ NO ₂
indanorexum indanorex	2-(1-aminopropyl)-2-indanol C ₁₂ H ₁₇ NO
indocatum indocate	2-(dimethylamino)ethyl 1-benzyl-2,3-dimethylindole-5-carboxylate C ₂₂ H ₂₆ N ₂ O ₂
lprilflavonum lprilflavone	7-isopropoxyisoflavone C ₁₈ H ₁₆ O ₃
isoconazololum isoconazole	1-[2,4-dichloro-β-[(2,6-dichlorobenzyl)oxy]phenethyl]imidazole C ₁₈ H ₁₄ Cl ₄ N ₂ O
isoxicamum isoxicam	4-hydroxy-2-methyl- <i>N</i> -(5-methyl-3-isoxazolyl)-2 <i>H</i> -1,2-benzothiazine-3-carboxamide 1,1-dioxide C ₁₄ H ₁₃ N ₃ O ₅ S
keracyaninum keracyanin	3-[[6- <i>O</i> -(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-3',4',5,7-tetrahydroxyflavylium chloride C ₂₇ H ₃₁ ClO ₁₅
lasalocidum lasalocid	6-[7(<i>R</i>)-[5(<i>S</i>)-ethyl-5-(5(<i>R</i>)-ethyltetrahydro-5-hydroxy-6(<i>S</i>)-methyl-2 <i>H</i> -pyran-2(<i>R</i>)-yl]tetrahydro-3(<i>S</i>)-methyl-2(<i>S</i>)-furyl]-4(<i>S</i>)-hydroxy-3(<i>R</i>),5(<i>S</i>)-dimethyl-6-oxononyl]-2,3-cresotic acid C ₃₄ H ₅₄ O ₈
lefetaminum lefetamine	(-)- <i>N,N</i> -dimethyl-1,2-diphenylethylamine C ₁₆ H ₁₉ N
lifibratum lifibrate	1-methyl-4-piperidyl glyoxylate 2-[bis(<i>p</i> -chlorophenyl) acetal] C ₂₀ H ₂₁ Cl ₂ N ₃ O ₄
magnesium clofibras magnesium clofibrate	bis[2-(<i>p</i> -chlorophenoxy)-2-methylpropionato]magnesium C ₂₀ H ₂₀ Cl ₂ MgO ₆
mecinaronum mecinarone	1-[6-[2-(dimethylamino)ethoxy]-4,7-dimethoxy-5-benzofuranyl]-3-(<i>p</i> -methoxyphenyl)-2-propen-1-one C ₂₄ H ₂₇ NO ₆
meptazinolum meptazinol	<i>m</i> -(3-ethylhexahydro-1-methyl-1 <i>H</i> -azepin-3-yl)phenol C ₁₅ H ₂₃ NO
metanixinum metanixin	2-(2,6-xylydino)nicotinic acid C ₁₄ H ₁₄ N ₂ O ₂
metiamidum metiamide	1-methyl-3-[2-[[5-methylimidazol-4-yl)methyl]thio]ethyl]-2-thiourea C ₉ H ₁₆ N ₄ S ₂
metoprololum metoprolol	(±)-1-(isopropylamino)-3-[<i>p</i> -(2-methoxyethyl)phenoxy]-2-propanol C ₁₅ H ₂₅ NO ₃
midecamycinum midecamycin	7-(formylmethyl)-4,10-dihydroxy-5-methoxy-9,16-dimethyl-2-oxooxacyclohexadeca-11,13-dien-6-yl 3,6-dideoxy-4- <i>O</i> -(2,6-dideoxy-3- <i>C</i> -methyl-α-L- <i>ribo</i> -hexopyranosyl)-3-(dimethylamino)-β-D-glucopyranoside 4',4''-dipropionate (ester) C ₄₁ H ₆₇ NO ₁₅

mirincamycinum mirincamycin	methyl 7-chloro-6,7,8-trideoxy-6-(<i>cis</i> -4-pentyl-L-2-pyrrolidinecarboxamido)-1-thio-L- <i>threo</i> - α -D- <i>galacto</i> -octopyranoside mixture with methyl 7-chloro-6,7,8-trideoxy-6-(<i>trans</i> -4-pentyl-L-2-pyrrolidinecarboxamido)-1-thio-L- <i>threo</i> - α -D- <i>galacto</i> -octopyranoside $C_{19}H_{35}ClN_2O_5S$
motrazepamum motrazepam	1,3-dihydro-1-(methoxymethyl)-7-nitro-5-phenyl-2 <i>H</i> -1,4-benzodiazepin-2-one $C_{17}H_{15}N_3O_4$
naftoxatum naftoxate	2-benzoxazolyl <i>N</i> -methyldithio-1-naphthalenecarbamate $C_{19}H_{14}N_2OS_2$
nicofibratum nicofibrate	3-pyridylmethyl 2-(<i>p</i> -chlorophenoxy)-2-methylpropionate $C_{16}H_{16}ClNO_3$
olaquinoxum olaquinox	<i>N</i> -(2-hydroxyethyl)-3-methyl-2-quinoxalinecarboxamide 1,4-dioxide $C_{12}H_{13}N_3O_4$
omidolinum omidoline	2-methyl-3-(β -piperidino- <i>p</i> -phenetidine)phthalimidine $C_{22}H_{27}N_3O_2$
ontianilum ontianil	4'-chloro-2,6-dioxocyclohexanecarbothioanilide $C_{13}H_{12}ClNO_2S$
oxantelum oxantel	(<i>E</i>)- <i>m</i> -[2-(1,4,5,6-tetrahydro-1-methyl-2-pyrimidinyl)vinyl]phenol $C_{13}H_{16}N_2O$
oxaprozinum oxaprozin	4,5-diphenyl-2-oxazolepropionic acid $C_{18}H_{15}NO_3$
oxibendazolum oxibendazole	methyl 5-propoxy-2-benzimidazolecarbamate $C_{12}H_{15}N_3O_3$
oxilorphanum oxilorphan	(-)-17-(cyclopropylmethyl)morphinan-3,14-diol $C_{20}N_27NO_2$
oxiperomidum oxiperomide	1-[1-(2-phenoxyethyl)-4-piperidyl]-2-benzimidazolinone $C_{20}H_{23}N_3O_2$
pazoxidum pazoxide	6,7-dichloro-3-(3-cyclopenten-1-yl)-2 <i>H</i> -1,2,4-benzothiadiazine 1,1-dioxide $C_{12}H_{10}Cl_2N_2O_2S$
pegoteratum pegoterate	condensation polymer between terephthalic acid and ethylene glycol as microcrystals of colloidal dimensions; poly(oxyethyleneoxyterephthaloyl) ($C_{10}H_8O_4$) _n where n = 20 to 100. Average molecular weight: 5000, with a molecular weight range from 3000 to 7000
piprofuroolum piprofurol	α -(<i>p</i> -hydroxyphenethyl)-4,7-dimethoxy-6-(2-piperidinoethoxy)-5-benzofuranmethanol $C_{26}H_{33}NO_6$
pirazofurinum pirazofurin	4-hydroxy-5- β -D-ribofuranosyl-1 <i>H</i> -pyrazole-3-carboxamide $C_9H_{13}N_3O_6$
pirbuterolum pirbuterol	α^6 -[(<i>tert</i> -butylamino)methyl]-3-hydroxy-2,6-pyridinedimethanol $C_{12}H_{20}N_2O_3$
pirenzepinum pirenzepine	5,11-dihydro-11-[(4-methyl-1-piperazinyl)acetyl]-6 <i>H</i> -pyrido[2,3- <i>b</i>]-[1,4]benzodiazepin-6-one $C_{19}H_{21}N_5O_2$
policapramum policapram	poly(iminocarbonylpentamethylene); approximate molecular weight = 5668 $C_{300}H_{552}N_{50}O_{51}$ (approximate)

prazocillium prazocillin	6-[1-(2,6-dichlorophenyl)-4-methylpyrazole-5-carboxamido]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid $C_{19}H_{18}Cl_2N_4O_4S$
prednimustinum prednimustine	11 β ,17,21-trihydroxypregna-1,4-diene-3,20-dione 21-[4-[<i>p</i> -[bis-(2-chloroethyl)amino]phenyl]butyrate] $C_{35}H_{45}Cl_2NO_6$
proflazepamum proflazepam	7-chloro-1-(2,3-dihydroxypropyl)-5-(<i>o</i> -fluorophenyl) 1,3-dihydro-2 <i>H</i> -1,4-benzodiazepin-2-one $C_{18}H_{16}ClFN_2O_3$
promestrienum promestriene	17 β -methoxy-3-propoxyestra-1,3,5(10)-triene $C_{22}H_{32}O_2$
protirelinum protirelin	5-oxo-L-prolyl-L-histidyl-L-prolinamide $C_{16}H_{22}N_6O_4$
quincarbatus quincarbonate	ethyl 10-chloro-3-(ethoxymethyl)-2,3,6,9-tetrahydro-9-oxo- <i>p</i> -dioxino[2,3- <i>g</i>]quinoline-8-carboxylate $C_{17}H_{18}ClNO_6$
reproterolum reproterol	7-[3-[(β ,3,5-trihydroxyphenethyl)amino]propyl]theophylline $C_{18}H_{23}N_5O_5$
romifenonum romifenone	2'-hydroxy-3-morpholinopropiophenone $C_{13}H_{17}NO_3$
salprotosidum salprotoside	ethyl 3- <i>O</i> -propyl-D-glucofuranoside 5,6-disalicylate $C_{25}H_{30}O_{10}$
salverinum salverine	2-[2-(diethylamino)ethoxy]benzanilide $C_{19}H_{24}N_2O_2$
saralasinum saralasin	<i>N</i> -[1-[<i>N</i> -[<i>N</i> -[<i>N</i> -[<i>N</i> -(<i>N</i> -methylglycyl)-L-arginyl]-L-valyl]-L-tyrosyl]-L-valyl]-L-histidyl]-L-prolyl]-L-alanine $C_{42}H_{65}N_{13}O_{10}$
secnidazolium secnidazole	α ,2-dimethyl-5-nitroimidazole-1-ethanol $C_7H_{11}N_3O_3$
seractidum seractide	25-L-aspartic acid-26-L-alanine-27-glycine-30-L-glutamine-31-L-serine- α^{1-39} -corticotropin (pig) 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-L-Asp-L-Gln-L-Ser-L-Ala-L-Glu-L-Ala-L-Phe-L-Pro-L-Leu-L-Glu-L-Phe-OH $C_{207}H_{308}N_{56}O_{58}S$
serrapeptasum serrapeptase	a proteolytic enzyme derived from <i>Serratia</i> sp.E15
siccaninum siccanin	(13a <i>S</i>)-1,2,3,4,4a β ,5,6,6a,11 β ,13 β -decahydro-4,4,6a β ,9-tetramethyl-13 <i>H</i> -benzo[<i>a</i>]furo[2,3,4- <i>mn</i>]xanthen-11-ol $C_{22}H_{30}O_3$
subendazolium subendazole	4,5,7-trichloro-2-[3-(methylthio)-1,2,4-thiadiazol-5-yl]-thio]benzimidazole $C_{10}H_5Cl_3N_4S_3$
sulfacolum sulfacole	2-ethoxy-4'-[(5-methyl-3-isoxazolyl)sulfamoyl]acetanilide $C_{14}H_{17}N_3O_5S$
sulfametrolum sulfametrole	<i>N</i> -(4-methoxy-1,2,5-thiadiazol-3-yl)sulfanilamide $C_9H_{10}N_4O_3S_2$
sulfonterolum sulfonterol	α -[(<i>tert</i> -butylamino)methyl]-4-hydroxy-3-[(methylsulfonyl)methyl]benzyl alcohol $C_{14}H_{23}NO_4S$
sulotidilum sulotidil	<i>p</i> -(isopropylthio)- α -[1-(octylamino)ethyl]benzyl alcohol $C_{20}H_{35}NOS$

suloxifen suloxifen	<i>N</i> -[2-(diethylamino)ethyl]- <i>S,S</i> -diphenylsulfoximide C ₁₈ H ₂₄ N ₂ OS
talampicillin talampicillin	D-(-)-6-(2-amino-2-phenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid ester with 3-hydroxyphthalide C ₂₄ H ₂₃ N ₃ O ₆ S
temefosum temefos	<i>O,O'</i> -(thiodi- <i>p</i> -phenylene) <i>O,O,O',O'</i> -tetramethyl bis-(phosphorothioate) C ₁₆ H ₂₀ O ₆ P ₂ S ₃
terbuficinum terbuficin	bis(3,5-di- <i>tert</i> -butyl-4-hydroxyphenyl)acetic acid C ₃₀ H ₄₄ O ₄
tianafacum tianafac	5-chloro-3-methylbenzo[<i>b</i>]thiophene-2-acetic acid C ₁₁ H ₉ ClO ₂ S
tiazurilum tiazuril	2-[4-[(<i>p</i> -chlorophenyl)thio]-3,5-xylyl]- <i>ss</i> -triazine-3,5-(2 <i>H</i> ,4 <i>H</i>)-dione C ₁₇ H ₁₄ ClN ₃ O ₂ S
tibenzatum tibenzate	<i>S</i> -benzyl thiobenzoate C ₁₄ H ₁₂ OS
tiocloamarolum tiocloamarol	3-[5-chloro- α -(<i>p</i> -chloro- β -hydroxyphenethyl)-2-thenyl]-4-hydroxycoumarin C ₂₂ H ₁₆ Cl ₂ O ₄ S
tioproninum tiopronin	<i>N</i> -(2-mercaptopropionyl)glycine C ₅ H ₉ NO ₃ S
toloxatonum toloxatone	5-(hydroxymethyl)-3- <i>m</i> -tolyl-2-oxazolidinone C ₁₁ H ₁₃ NO ₃
tramadolium tramadol	(\pm)- <i>trans</i> -2-[(dimethylamino)methyl]-1-(<i>m</i> -methoxyphenyl)cyclohexanol C ₁₆ H ₂₅ NO ₂
triazolamum triazolam	8-chloro-6-(<i>o</i> -chlorophenyl)-1-methyl-4 <i>H</i> - <i>s</i> -triazolo[4,3- <i>a</i>]-[1,4]benzodiazepine C ₁₇ H ₁₂ Cl ₂ N ₄
triclomidum triclomide	9,11 β ,21-trichloro-6 α -fluoro-16 α ,17-dihydroxypregna-1,4-diene-3,20-dione cyclic acetal with acetone C ₂₄ H ₂₈ Cl ₃ FO ₄
trimazosinum trimazosin	2-hydroxy-2-methylpropyl 4-(4-amino-6,7,8-trimethoxy-2-quinazolinyl)-1-piperazinecarboxylate C ₂₀ H ₂₉ N ₅ O ₆
trioxolanum trioxolane	4-[[2-methyl-2-(3,4,5-trimethoxyphenyl)-1,3-dioxolan-4-yl]methyl]-morpholine C ₁₈ H ₂₇ NO ₆
uldazepamum uldazepam	2-[(allyloxy)amino]-7-chloro-5-(<i>o</i> -chlorophenyl)-3 <i>H</i> -1,4-benzodiazepine C ₁₈ H ₁₅ Cl ₂ N ₃ O
viloxazinum viloxazine	2-[(<i>o</i> -ethoxyphenoxy)methyl]morpholine C ₁₃ H ₁₉ NO ₃
warfarinum warfarin	3-(α -acetonylbenzyl)-4-hydroxycoumarin C ₁₉ H ₁₆ O ₄
xantifibratum xantifibrate	7-[2-hydroxy-3-[(2-hydroxyethyl)methylamino]propyl]theophylline compound with 2-(<i>p</i> -chlorophenoxy)-2-methylpropionic acid (1:1) C ₁₃ H ₂₁ N ₅ O ₄ ·C ₁₀ H ₁₁ ClO ₃ or C ₂₃ H ₃₂ ClN ₅ O ₇
xenbucinum xenbucin	α -ethyl-4-biphenylacetic acid C ₁₆ H ₁₆ O ₂

**AMENDMENTS
TO PREVIOUS LISTS**

Vol. 16, No. 3

Recommended International Nonproprietary Names (Rec. INN): List 4

- p. 108 paromomycinum
paromomycin
- replace the present definition by the following: 0-2,6-diamino-2,6-dideoxy- β -L-idopyranosyl-(1 \rightarrow 3)-0- β -D-ribofuranosyl-(1 \rightarrow 5)-0- [2-amino-2-deoxy- α -D-glucopyranosyl-(1 \rightarrow 4)]-2-deoxystreptamine*
 $C_{23}H_{45}N_5O_{14}$

Vol. 19, No. 4

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

- p. 168 butopiprinum
butopiprine
- replace chemical name by the following:*
2-butoxyethyl α -phenyl-1-piperidineacetate

Vol. 27, No. 10

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

- p. 453 acidum cicloxilicum
cicloxilic acid
- replace chemical name by the following:*
cis-2-hydroxy-2-phenylcyclohexanecarboxylic acid
- p. 457 ipratropii bromidum
ipratropium bromide
- replace chemical name by the following:*
(8*r*)-3 α -hydroxy-8-isopropyl-1 α H,5 α H-tropanium bromide (\pm)-tropate
- p. 459 timololum
timolol
- replace molecular formula by the following:*
 $C_{13}H_{21}N_4O_3S$