WHO/EMP/QSM/2010.3

International Nonproprietary Names (INN) for pharmaceutical substances

Names for radicals, groups & others
Comprehensive list

2010

International Nonproprietary Names (INN) Programme
Quality and Safety: Medicines
Essential Medicines and Pharmaceutical Policies

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Preface

WHO'S INN PROGRAMME

The World Health Organization (WHO) has a constitutional responsibility to "develop, establish and promote international standards with respect to biological, pharmaceutical and similar products". The International Nonproprietary Names (INN) Programme is a core activity embedded in the normative functions of WHO and has served the global public health and medicines community for over fifty years. The Programme was established to assign nonproprietary names to pharmaceutical substances so that each substance would be recognized by a unique name. Such names are needed for the clear identification, safe prescription and dispensing of medicines, and for communication and exchange of information among health professionals. INNs can be used freely because they are in the public domain. In addition to being a basic component of many WHO medicines activities and programmes, INNs are used in regulatory and administrative processes in many countries. They are also intended for use in pharmacopoeias, labelling, and product information and to provide standardized terminology for the international exchange of scientific information.

INN SELECTION PROCEDURE

Each name proposed for designation as an INN is examined and selected in accordance with a formal procedure. Requests for INNs can be submitted directly to WHO (application forms online at http://www.who.int/medicines/services/inn/en/). In some countries where national nomenclature commissions exist, applications may also be made through the national nomenclature authority.

The INN Expert Group, member of the WHO Expert Panel on the International Pharmacopoeia and Pharmaceutical Preparations is officially designated to select nonproprietary names. Based on the information provided, an agreed name is selected and published as a ***proposed*** INN. During a four month period, any person can make comments or lodge a formal objection to the proposed name. If no objection is raised, this agreed name is published as the ***recommended*** INN.

In 1993, the World Health Assembly endorsed resolution WHA46.19 which states that trade marks should not be derived from INNs and INN stems should not be used in trade marks. The Assembly reasoned that such practice could frustrate the rational selection of INNs and ultimately compromise the safety of patients by promoting confusion in drug nomenclature. Above all, INNs are protected for use in the public domain.

CRITERIA FOR SELECTION

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

In addition, certain rules have been established in devising INNs to facilitate their use internationally. For example, to make pronunciation possible in various languages, the letters "h" and "k" should be avoided; "e" should be used instead of "ae" and "oe", "i" instead of "y", "t" instead of "th" and "f" instead of "ph".

Information on transliteration of Greek letters in English, French and Spanish is given in Annex 2 and on standardization of the Spanish version of INN in Annex 3.

Further information on the selection procedure and general principles in devising INNs may be found in the “Guidelines on the Use of International Nonproprietary Names (INNs) for Pharmaceutical Substances” (WHO/PHARM S/NOM 1570).

INN STEMS

Stems define the pharmacologically related group to which the INN belongs. Whenever possible, an INN includes the "common stem" expressing the pharmacologically-related group to which the substance belongs. Names that are likely to convey an anatomical, physiological, pathological or therapeutic suggestion are avoided.
For further details on stems, please refer to "*The use of stems in the selection of International Nonproprietary Names (INN) for pharmaceutical substances*" (WHO/EMP/QSM/2009.3), which can be downloaded from the INN Programme website:
http://www.who.int/medicines/services/inn/en/

NAMES FOR RADICALS AND GROUPS

As a general rule, since 1975 INNs are selected for the active moiety of pharmaceutical substances. In the case of INNs of salts and esters it is left to the user to devise their names from the INN in conformity with normal chemical practice. Separate names for salts and esters derived from this procedure are not published. The same approach should be followed in the case of combination products. In all those situations, names are referred to as International Nonproprietary Name Modified INNM.

Some of the radicals and groups involved are, however, of such complexity that, shorter nonproprietary names are selected for these inactive moieties, and published in proposed lists under the title "names for radicals and groups". If a "radical and group name" is used in conjunction with an INN, it is also referred to as an INNM.

In some cases, a name of an INN Radical describes more than one substituent, e.g. (names in Latin) *acefuras*, *aceponas*, *enbutas*, *stinopras*,… Alphabetical list of currently used names for radicals and groups is given in the main part of the document, while the names of elements and chemical groups that were published together with INNs are given in Annex 1.

For further details on the INNM, please refer to the INN Working Document 05.167/3 "*International Nonproprietary Names Modified*" which can be downloaded from the INN Programme website.

OTHER INFORMATION

For a few groups of substances that contain certain structural features, but have not been included in INN stem system, INNs are selected using particular approaches. Designations used in such INNs are listed in Annex 4.
INNs for substances that include a carrier moiety are usually given a two-word name,

describing separately the active element and the carrier part. Designations used for toxins (either active or inactivated proteins) are listed in Annex 4.1. Particular designations selected for other types of active moieties and relevant INNs are listed in Annex 4.2. It should be noted that these lists are not comprehensive.
INNs for modified insulins include, as a second word, a qualifier indicating to modifications introduced into the amino acid chain. These insulin qualifiers are listed in Annex 4.3.
INNs for substances that contain as the carrier a polyoxyethylene polymeric chain are given either a prefix *peg-* or a two word INN, using "*pegol*" as the second word. The list of INNs containing such structures and an explanatory note is given in Annex 5.

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Acknowledgements

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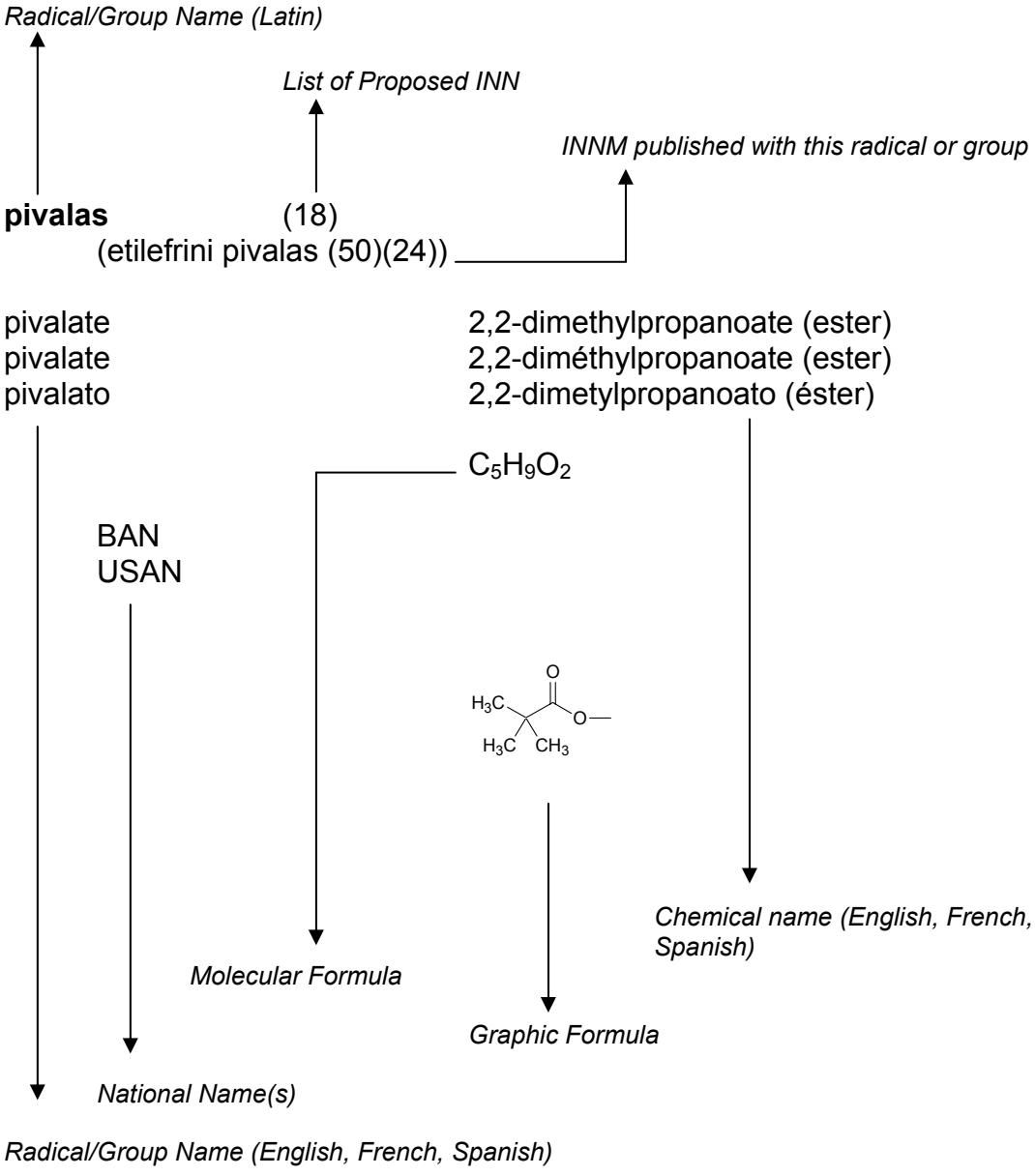
Reference to publications containing proposed lists of INNs:

List no. and reference	List no. and reference
1 *Chron. Wld Hlth Org*. 7: 299 (1953)	46 *WHO chronicle* 35: No. 5, suppl. (1981)
2 *Chron. Wld Hlth Org*. 8: 216 (1954)	47 *WHO chronicle* 36: No. 2, suppl. (1982)
3 *Chron. Wld Hlth Org.* 8: 313 (1954)	48 *WHO chronicle* 36: No. 5, suppl. (1982)
4 *Chron. Wld Hlth Org* 10: 28 (1956)	49 *WHO chronicle* 37: No. 2, suppl. (1983)
5 *Chron. Wld Hlth Org.* 11: 231 (1957)	50 *WHO chronicle* 37: No. 5, suppl. (1983)
6 *Chron. Wld Hlth Org*. 12: 102 (1958)	51 *WHO chronicle* 38: No. 2 suppl. (1984)
7 *WHO chronicle* 13: 105 (1959)	52 *WHO chronicle* 38: No. 4, suppl. (1984)
8 *WHO chronicle* 13: 152 (1959)	53 *WHO chronicle* 39: No. 1, suppl. (1985)
9 *WHO chronicle* 14: 168 (1960)	54 *WHO chronicle* 39: No. 4, suppl. (1985)
10 *WHO chronicle* 14: 244 (1960)	55 *WHO chronicle* 40: No. l, suppl. (1986)
11 *WHO chronicle* 15: 314 (1961)	56 *WHO chronicle* 40: No. 5, suppl. (1986)
12 *WHO chronicle* 16: 385 (1962)	57 *WHO drug information* 1: No. 2 (1987)
13 *WHO chronicle* 17: 389 (1963)	58 *WHO drug information* 1: No. 3 (1987)
14 *WHO chronicle* 18: 433 (1964)	59 *WHO drug information* 2: No. 2 (1988)
15 *WHO chronicle* 19: 446 (1965)	60 *WHO drug information* 2: No. 4 (1988)
16 *WHO chronicle* 20: 216 (1966)	61 *WHO drug information* 3: No. 2 (1989)
17 *WHO chronicle* 21: 70 (1967)	62 *WHO drug information* 3: No. 4 (1989)
18 *WHO chronicle* 21: 478 (1967)	63 *WHO drug information* 4: No. 2 (1990)
19 *WHO chronicle* 22: 112 (1968)	64 *WHO drug information* 4: No. 4 (1990)
20 *WHO chronicle* 22: 407 (1968)	65 *WHO drug information* 5: No. 2 (1991)
21 *WHO chronicle* 23: 183 (1969)	66 *WHO drug information* 5: No. 4 (1991)
22 *WHO chronicle* 23: 418 (1969)	67 *WHO drug information* 6: No. 2 (1992)
23 *WHO chronicle* 24: 119 (1970)	68 *WHO drug information* 6: No. 4 (1992)
24 *WHO chronicle* 24: 413 (1970)	69 *WHO drug information* 7: No. 2 (1993)
25 *WHO chronicle* 25: 123 (1971)	70 *WHO drug information* 7: No. 4 (1993)
26 *WHO chronicle* 25: 415 (1971)	71 *WHO drug information* 8: No. 2 (1994)
27 *WHO chronicle* 26: 121 (1972)	72 *WHO drug information* 8: No. 4 (1994)
28 *WHO chronicle* 26: 414 (1972)	73 *WHO drug information* 9: No. 2 (1995)
29 *WHO chronicle* 27: 120 (1973)	74 *WHO drug information* 9: No. 4 (1995)
30 *WHO chronicle* 27: 380 (1973)	75 *WHO drug information* 10: No. 2 (1996)
31 *WHO chronicle* 28: 133 (1974)	76 *WHO drug information* 10: No. 4 (1996)
32 *WHO chronicle* 28: No. 9, suppl. (1974)	77 *WHO drug information* 11: No. 2 (1997)
33 *WHO chronicle* 29: No. 3, suppl. (1975)	78 *WHO drug information* 11: No. 4 (1997)
34 *WHO chronicle* 29: No. 9, suppl. (1975)	79 *WHO drug information* 12: No. 2 (1998)
35 *WHO chronicle* 30: No. 3, suppl. (1976)	80 *WHO drug information* 12: No. 4 (1998)
36 *WHO chronicle* 30: No. 9, suppl. (1976)	81 *WHO drug information* 13: No. 2 (1999)
37 *WHO chronicle* 3l: No. 3, suppl. (1977)	82 *WHO drug information* 13: No. 4 (1999)
38 *WHO chronicle* 31: No. 9, suppl. (1977)	83 *WHO drug information* 14: No. 2 (2000)
39 *WHO chronicle* 32: No. 3, suppl. (1978)	84 *WHO drug information* 14: No. 4 (2000)
40 *WHO chronicle* 32: No. 9, suppl. (1978)	85 *WHO drug information* 15: No. 2 (2001)
41 *WHO chronicle* 33: No. 3, suppl. (1979)	86 *WHO drug information* 16: No. 1 (2002)
42 *WHO chronicle* 33: No. 9, suppl. (1979)	87 *WHO drug information* 16: No. 2 (2002)
43 *WHO chronicle* 34: No. 3, suppl. (1980)	88 *WHO drug information* 17: No. 1 (2003)
44 *WHO chronicle* 34: No. 9, suppl. (1980)	89 *WHO drug information* 17: No. 3 (2003)
45 *WHO chronicle* 35: No. 3, suppl. (1981)	90 *WHO drug information* 18: No. 1 (2004)

List no. and reference

91 *WHO drug information* 18: No. 2 (2004)
92 *WHO drug information* 18: No. 4 (2004)
93 *WHO drug information* 19: No. 2 (2005)
94 *WHO drug information* 19: No. 4 (2005)
95 *WHO drug information* 20: No. 2 (2006)
96 *WHO drug information* 20: No. 4 (2006)
97 *WHO drug information* 21: No. 2 (2007)
98 *WHO drug information* 21: No. 4 (2007)
99 *WHO drug information* 22: No. 2 (2008)
100 *WHO drug information* 22: No. 4 (2008)
101 *WHO drug information* 23: No. 2 (2009)
102 *WHO drug information* 23: No. 4 (2009)
103 *WHO drug information* 24: No. 2 (2010)

Layout of information



INNs: Names for radicals and groups

Comprehensive list

Explanatory Note

Some substances for which a proposed International Nonproprietary Name has been established for the active moiety may be used in the form of salts or esters and their names are devised from the INN in conformity with normal chemical practice. However, in some cases, the radicals or groups involved may be of complex composition and it is then inconvenient to refer to them in systematic chemical nomenclature. Consequently, shorter nonproprietary names for some radicals and groups have been devised or selected, and they are suggested for use with the proposed nonproprietary names.

The following list contains radicals and groups which have been published either in the section "Names for radicals and groups" in lists 1-103 of proposed INN or as part of a two-word INN in lists 1-103 of proposed and 1-64 of recommended INN, respectively. Whenever a name appeared in both lists, reference is made to its publication only in the category "radicals and groups".

Other groups and elements which have been published in two-word INN and which may now be considered as being part of the INNM (modified INN) approach are listed in ANNEX 1 of this document.

In addition, references to British Approved Name (BAN)[1], Japanese Accepted Name (JAN)[2] and United States Adopted Name (USAN)[3] have been included for the radicals, groups and adducts published or accepted for use by these national nomenclature committees.

[1] British Pharmacopoeia 2007 Complete Edition CD, Names for ions and Groups, Supplement No. 3, effective date: 1 January 2010
[2] Japanese Accepted Names for Pharmaceuticals (JAN), last update: 1 April 2010 at : http://moldb.nihs.go.jp/jan/index.aspx
[3] "USP Dictionnary of USAN and International Drug names", 2010 "Organic moieties, Counterions and Solvent Molecules Used in Coining Two-Word Names", p. 1345-1348, USAN Program

Latin name
English name *chemical name*
Dénomination en français *molecular formula*
Denominación en español *graphic formula*
(published as INN (Proposed list number)(Recommended list number))

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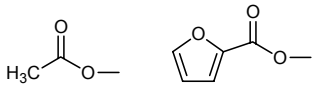
acefuras
(dexamethasoni acefuras (57)(27))

acefurate acetate (ester), furan-2-carboxylate (ester)
acéfurate acétate (ester), furane-2-carboxylate (ester)
acefurato acetato (éster), furano-2-carboxilato (éster)

$C_7H_6O_5$

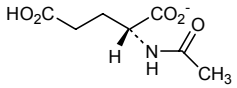
USAN



aceglumas
(deanoli aceglumas (15)(!))

aceglumate hydrogen *rac*-*N*-acetylglutamate
acéglumate hydrogène *rac*-*N*-acétylglutamate
aceglumato hidrógeno *rac*-*N*-acetilglutamato

$C_7H_{10}NO_5$

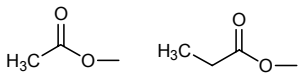


and enantiomer
et énantiomère
y enantiómero

aceponas
(methylprednisoloni aceponas (52)(25))
(hydrocortisoni aceponas (54)(26))

aceponate acetate (ester), propanoate (ester)
acéponate acétate (ester), propanoate (ester)
aceponato acetato (éster), propanoato (éster)

$C_5H_8O_4$

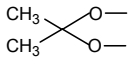


acetonidum
(fluocinoloni acetonidum (11)(05))
(flucloroloni acetonidum (22)(10))

acetonide	propane-2,2-diylbis(oxy)
acétonide	propane-2,2-diylbis(oxy)
acetónido	propano-2,2-diilbis(oxi)

$C_3H_6O_2$

BAN
JAN
USAN

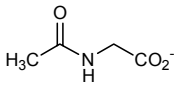


aceturas (22)

aceturate	*N*-acetylglycinate
acéturate	*N*-acétylglycinate
aceturato	*N*-acetilglicinato

$C_4H_6NO_3$

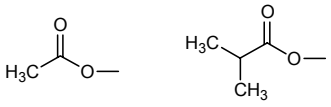
BAN
USAN



acibutas
(betamethasoni acibutas (26)(12))

acibutate	acetate (ester), 2-methylpropanoate (ester)
acibutate	acétate (ester), 2-méthylpropanoate (ester)
acibutato	acetato (éster), 2-metilpropanoato (éster)

$C_6H_{10}O_4$

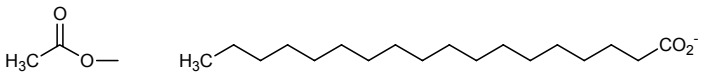


acistras (64)
(erythromycini acistras (53)(25))

acistrate	acetate (ester), octadecanoate (salt)
acistrate	acétate (ester), octadécanoate (sel)
acistrato	acetato (éster), octadecanoato (sal)

$C_{20}H_{38}O_4$

USAN

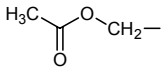


acoxilum (67)

acoxil	(acetyloxy)methyl
acoxil	(acétyloxy)méthyle
acoxilo	(acetiloxi)metilo

$C_3H_5O_2$

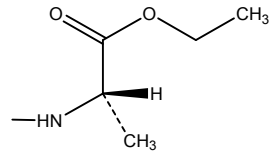
JAN
USAN



alanetilum
(managlinatum dialanetilum (97)(58))

alanetil	[(*S*)-1-ethoxy-1-oxo-propan-2-yl]amino
alanétil	[(*S*)-1-éthoxy-1-oxo-propan-2-yl]amino
alanetilo	[(*S*)-1-etoxi-1-oxo-propan-2-il]amino

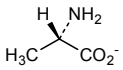
$C_5H_{11}NO_2$



alaninas
(alaninati brivanibum (97)(59))

alaninate	L-alaninate
alaninate	L-alaninate
alaninato	L-alaninato

$C_3H_6NO_2$

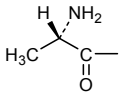


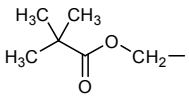
alapivoxilum
(ceftizoximum alapivoxilum (77)(39))

alapivoxil	L-alanyl, [(2,2-dimethylpropanoyl)oxy]methyl
alapivoxil	L-alanyle, [(2,2-diméthylpropanoyl)oxy]méthyle
alapivoxilo	L-alanilo, [(2,2-dimetilpropanoil)oxi]metilo

$C_9H_{17}NO_3$

JAN

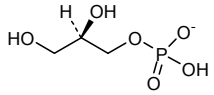




alfosceras
(cholini alfosceras (60)(29))

alfoscerate	(2*R*)-2,3-dihydroxypropyl hydrogen phosphate
alfoscérate	hydrogénophosphate de (2*R*)-2,3-dihydroxypropyle
alfoscerato	hidrógenofosfato de (2*R*)-2,3-dihidroxipropilo

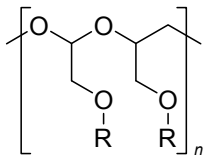
$C_3H_8O_6P$



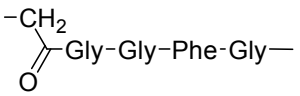
alideximerum
(exatecanum alideximerum (89)(51))

alideximer	poly([oxy(2-hydroxyethane-1,1-diyl)]{oxy[1-(hydroxymethyl)ethane-1,2-diyl]}) partly *O*-etherified with carboxymethyl groups with some carboxy groups amide linked to the tetrapeptide residue (glygylglycyl-L-phenylalanylglycyl)
alideximer	poly([oxy(2-hydroxyéthane-1,1-diyl)]{oxy[1-(hydroxyméthyl)éthane-1,2-diyl]}) partiellement *O*-éthérifié avec le groupe carboxyméthyle avec quelques groupes carboxamides liés au tétrapeptide (glygylglycyl-L-phénylalanylglycyl)
alidexímero	poli([oxi(2-hidroxietano-1,1-diil)]{oxi[1-(hidroximetil)etano-1,2-diil]}) parcialmente *O*-eterificado con grupos carboximetilo con algunos grupos carboxamida unidos al tetrapéptido (glicilglicil-L-fenilalanilglicilglicil)

$[(C_5H_{10}O_4)_x.(C_7H_{12}O_6)_y.(C_{22}H_{30}N_4O_9)_z]_n$



−R = -H or / ou / o :
$-CH_2-CO_2H$
or / ou / o :

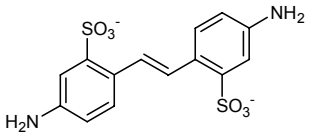


amsonas (18)
(chlorphenoctii amsonas (08)(04))

amsonate	2,2'-ethene-1,2-diylbis(5-aminobenzene-1-sulfonate)
amsonate	2,2'-éthène-1,2-diylbis(5-aminobenzène-1-sulfonate)
amsonato	2,2'-eteno-1,2-diilbis(5-aminobenceno-1-sulfonato)

$C_{14}H_{12}N_2O_6S_2$

BAN

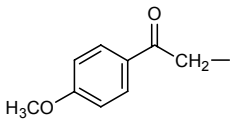


anisatilum (76)

anisatil 2-(4-methoxyphenyl)-2-oxoethyl
anisatil 2-(4-méthoxyphényl)-2-oxoéthyle
anisatilo 2-(4-metoxifenil)-2-oxoetilo

$C_9H_9O_2$

USAN

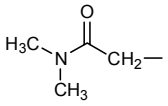


arbamelum
(tilnoprofenum arbamelum (74)(36))

arbamel 2-(dimethylamino)-2-oxoethyl
arbamel 2-(diméthylamino)-2-oxoéthyle
arbamel 2-(dimetilamino)-2-oxoetilo

C_4H_8NO

JAN
USAN

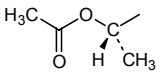


axetilum (48)

axetil *rac*-1-(acetyloxy)ethyl
axétil *rac*-1-(acétyloxy)éthyle
axetilo *rac*-1-(acetiloxi)etilo

$C_4H_7O_2$

BAN
JAN
USAN

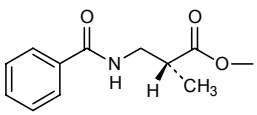


and enantiomer
et énantiomère
y enantiómero

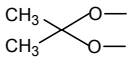
benetonidum
(triamcinoloni benetonidum (36)(17))

benetonide *rac*-*N*-benzoyl-2-methyl-β-alanine (ester), propane-2,2-diylbis(oxy)
bénétonide *rac*-3-(benzoylamino)-2-méthylpropanoate (ester), propane-2,2-diylbis(oxy)
benetónido *rac*-3-(benzoilamino)-2-metilpropanoato (éster), propano-2,2-diilbis(oxi)

$C_{14}H_{18}NO_5$



and enantiomer
et énantiomère
y enantiómero

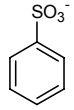


besilas (22)
(atracurii besilas (42)(20))
(cisatracurii besilas (73)(36))
(nolpitantii besilas (75)(37))

besilate benzenesulfonate
bésilate benzènesulfonate
besilato bencenosulfonato

$C_6H_5O_3S$

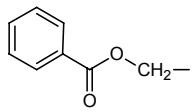
BAN
JAN
USAN: besylate



bezomilum (62)

bezomil (benzoyloxy)methyl
bézomil (benzoyloxy)méthyle
bezomilo (benzoiloxi)metilo

$C_8H_7O_2$

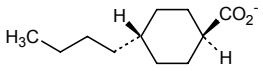


buciclas (66)

buciclate *trans*-4-butylcyclohexanecarboxylate
buciclate *trans*-4-butylcyclohexanecarboxylate
buciclato *trans*-4-butilciclohexanocarboxilato

$C_{11}H_{19}O_2$

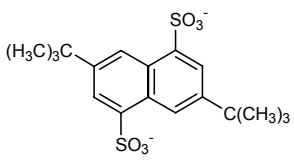
USAN



bunapsilas (24)

bunapsilate 3,7-di-*tert*-butylnaphthalene-1,5-disulfonate
bunapsilate 3,7-di-*tert*-butylnaphtalène-1,5-disulfonate
bunapsilato 3,7-di-*terc*-butilnaftaleno-1,5-disulfonato

$C_{18}H_{22}O_6S_2$

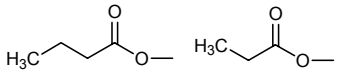


butepras (61)

buteprate	butanoate (ester), propanoate (ester)
butéprate	butanoate (ester), propanoate (ester)
buteprato	butanoato (éster), propanoato (éster)

$C_7H_{12}O_4$

USAN: probutate

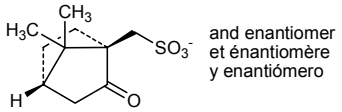


camsilas (18)
(trimetaphani camsilas (06)(03))
(amoxydramini camsilas (15)(06))

camsilate	*rac*-(7,7-dimethyl-2-oxobicyclo[2.2.1]heptan-1-yl)methanesulfonate
camsilate	*rac*- (7,7-diméthyl-2-oxobicyclo[2.2.1]heptan-1-yl)méthanesulfonate
camsilato	*rac*- (7,7-dimetil-2-oxobiciclo[2.2.1]heptan-1-il)metanosulfonato

$C_{10}H_{15}O_4S$

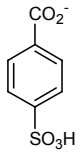
BAN
JAN
USAN: camsylate



carbesilas (35)

carbesilate	4-sulfobenzoate
carbésilate	4-sulfobenzoate
carbesilato	4-sulfobenzoato

$C_7H_5O_5S$

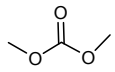


carbonas
(lodenafili carbonas (94)(56))

carbonate	carbonate (ester)
carbonate	carbonate (ester)
carbonato	carbonato (éster)

CO_3

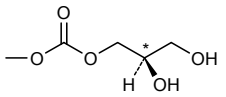
JAN



ceribas
(paclitaxelum ceribas (92)(53))

ceribate	*rac*-2,3-dihydroxypropyl carbonate (ester)
céribate	carbonate de *rac*-2,3-dihydroxypropyle (ester)
ceribato	carbonato de *rac*-2,3-dihidroxipropilo (éster)

$C_4H_7O_5$



and epimer at C*
et l'épimère en C*
y el epímero en el C*

ciclotas (28)

ciclotate	4-methylbicyclo[2.2.2]oct-2-ene-1-carboxylate
ciclotate	4-méthylbicyclo[2.2.2]oct-2-ène-1-carboxylate
ciclotato	4-metilbiciclo[2.2.2]oct-2-eno-1-carboxilato

$C_{10}H_{13}O_2$

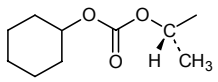
USAN: cyclotate

cilexetilum (73)

cilexetil	*rac*-1-{[(cyclohexyloxy)carbonyl]oxy}ethyl
cilexétil	*rac*-1-{[(cyclohexyloxy)carbonyl]oxy}]éthyle
cilexetilo	*rac*-1-{[(ciclohexiloxi)carbonil]oxi}etilo

$C_9H_{15}O_3$

BAN
JAN
USAN



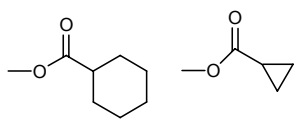
and enantiomer
et énantiomère
y enantiómero

cipecilatum
(dexamethasoni cipecilas (94)(56))

cipecilate	cyclohexanecarboxylate (ester), cyclopropanecarboxylate (ester)
cipécilate	cyclohexanecarboxylate (ester), cyclopropanecarboxylate (ester)
cipecilato	ciclohexanocarboxilato (éster), ciclopropanocarboxilato (éster)

$C_{11}H_{16}O_4$

JAN

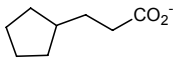


cipionas (18)
(oxaboloni cipionas (14)(06))

cipionate	3-cyclopentylpropanoate
cipionate	3-cyclopentylpropanoate
cipionato	3-ciclopentilpropanoato

$C_8H_{13}O_2$

BAN
JAN
USAN: cypionate

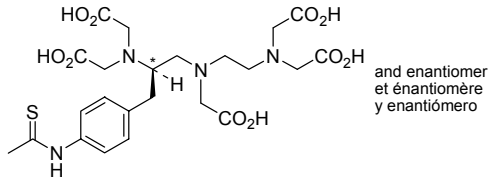


cituxetanum
(epitumomabum cituxetanum (89)(51))

cituxetan	*rac*-*N*-(4-{2-[bis(carboxymethyl)amino]-3-({2-[bis(carboxymethyl)amino]ethyl}(carboxymethyl)=aminopropyl}phenyl)thiocarbamoyl
cituxétan	*rac*-*N*-(4-{2-[bis(carboxyméthyl)amino]-3-({2-[bis(carboxyméthyl)amino]éthyl}(carboxyméthyl)=aminopropyl}phényl)thiocarbamoyle
cituxetán	*rac*-*N*-(4-{2-[bis(carboximetil)amino]-3-({2-[bis(carboximetil)=amino]etil}(carboximetil)aminopropil}fenil)tiocarbamoilo

$C_{22}H_{29}N_4O_{10}S$

BAN

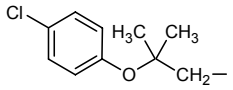


and enantiomer
et énantiomère
y enantiómero

clofibrolum
(acefyllinum clofibrolum (44)(22))

clofibrol	2-(4-chlorophenoxy)-2-methylpropyl
clofibrol	2-(4-chlorophénoxy)-2-méthylpropyle
clofibrol	2-(4-clorofenoxi)-2-metilpropilo

$C_{10}H_{12}ClO$

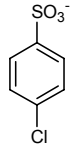


closilas (18)
(thenii closilas (12)(05))

closilate	4-chlorobenzene-1-sulfonate
closilate	4-chlorobenzène-1-sulfonate
closilato	4-clorobenceno-1-sulfonato

$C_6H_4ClO_3S$

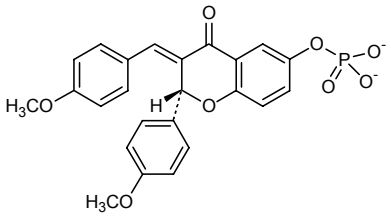
BAN
USAN: closylate



crobefas (61)

crobefate *rac*-(3*E*)-3-[-(4-methoxyphenyl)methylidene]-2-(4-methoxyphenyl)-4-oxochroman-6-yl phosphate(2–)
crobéfate phosphate(2–) de *rac*-(3*E*)-3-[-(4-méthoxyphényl)méthylidène]-2-(4-méthoxyphényl)-4-oxochroman-6-yle
crobefato fosfato(2-) de *rac*-(3*E*)-3-[-(4-metoxifenil)metilideno]-2-(4-metoxifenil)-4-oxocroman-6-ilo

$C_{24}H_{19}O_8P$

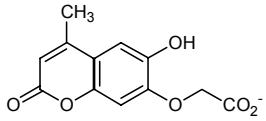


and enantiomer
et énantiomère
y enantiómero

cromacas (22)

cromacate 2-[(6-hydroxy-4-methyl-2-oxo-2*H*-chromen-7-yl)oxy]acetate
cromacate 2-[(6-hydroxy-4-méthyl-2-oxo-2*H*-chromén-7-yl)oxy]acétate
cromacato 2-[(6-hidroxi-4-metil-2-oxo-2*H*-cromen-7-il)oxi]acetato

$C_{12}H_9O_6$

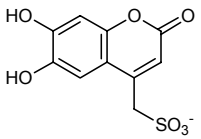


cromesilas (22)

cromesilate (6,7-dihydroxy-2-oxo-2*H*-chromen-4-yl)methanesulfonate
cromésilate (6,7-dihydroxy-2-oxo-2*H*-chromén-4-yl)méthanesulfonate
cromesilato (6,7-dihidroxi-2-oxo-2*H*-cromen-4-il)metanosulfonato

$C_{10}H_7O_7S$

BAN

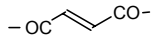


crosfumarilum
(hemoglobinum crosfumarilum (76)(38))

crosfumaril	(2*E*)-but-2-enedioyl
crosfumaril	(2*E*)-but-2-ènedioyle
crosfumarilo	(2*E*)-but-2-enodioilo

$C_4H_4N_2O_2$

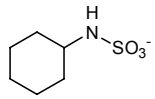
USAN



cyclamas
(aminophenazoni cyclamas (16)(!))
(natrii cyclamas (01)(01))

cyclamate	cyclohexylsulfamate
cyclamate	cyclohexylsulfamate
ciclamato	ciclohexilsulfamato

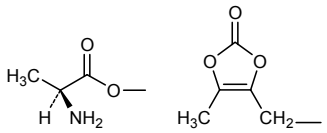
$C_6H_{12}NO_3S$



daloxatum
(cefcanelum dolaxatum (59)(29))

daloxate	L-alaninate (ester), (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl
daloxate	L-alaninate (ester), (5-méthyl-2-oxo-1,3-dioxol-4-yl)méthyle
daloxato	L-alaninato (éster), (5-metil-2-oxo-1,3-dioxol-4-il)metilo

$C_8H_{11}NO_5$

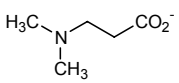


daropas (74)

daropate	3-(dimethylamino)propanoate
daropate	3-(diméthylamino)propanoate
daropato	3-(dimetilamino)propanoato

$C_5H_{10}NO_2$

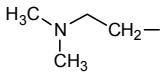
JAN
USAN: dapropate



deanil (40)

deanil 2-(dimethylamino)ethyl
déanil 2-(diméthylamino)éthyle
déanilo 2-(dimetilamino)etilo

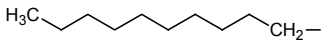
$C_4H_{10}N$



decil (40)

decil decyl
décil décyle
decilo decilo

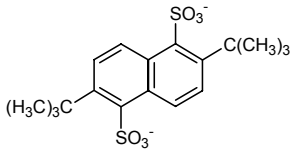
$C_{10}H_{21}$



dibudinas (25)

dibudinate 2,6-di-*tert*-butylnaphthalene-1,5-disulfonate
dibudinate 2,6-bis(1,1-diméthyléthyl)naphtalène-1,5-disulfonate
dibudinato 2,6-di-*terc*-butilnaftaleno-1,5-disulfonato

$C_{18}H_{22}O_6S_2$

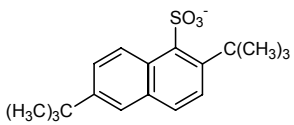


dibunas (48)
(ethylis dibunas (12)(05))
(natrii dibunas (12)(05))

dibunate 2,6-di-*tert*-butylnaphthalene-1-sulfonate
dibunate 2,6-di-*tert*-butylnaphtalène-1-sulfonate
dibunato 2,6-di-*terc*-butilnaftaleno-1-sulfonato

$C_{18}H_{23}O_3S$

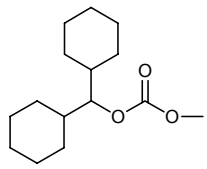
JAN



dicibas
(locicortoloni dicibas (60)(29))

dicibate	dicyclohexylmethyl carbonate (ester)
dicibate	carbonate de dicyclohexylméthyle (ester)
dicibato	carbonato de diciclohexilmetilo (éster)

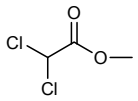
$C_{14}H_{23}O_3$



dicloacetas
(etiprednoli dicloacetas (88)(50))

dicloacetate	2,2-dichloroacetate (ester)
dicloacétate	2,2-dichloroacétate (ester)
dicloacetato	2,2-dicloroacetato (éster)

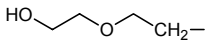
$C_2HCl_2O_2$



digolilum (59)

digolil	2-(2-hydroxyethoxy)ethyl
digolil	2-(2-hydroxyéthoxy)éthyle
digolilo	2-(2-hidroxietoxi)etilo

$C_4H_9O_2$

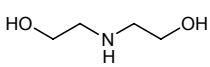


diolaminum (22)

diolamine	2,2'-azanediyldiethanol
diolamine	2,2'-azanediyldiéthanol
diolamina	2,2'-azanodiildietanol

$C_4H_{11}NO_2$

USAN

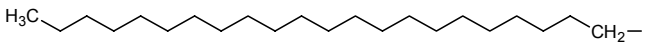


docosilum (63)

docosil	docosyl
docosil	docosyle
docosilo	docosilo

$C_{22}H_{45}$

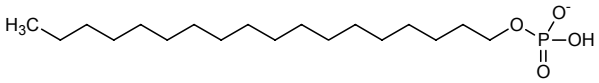
JAN



dofosfatum (65)

dofosfate	octadecyl hydrogen phosphate
dofosfate	hydrogénophosphate d'octadécyle
dofostato	hidrógenofosfato de octadecilo

$C_{18}H_{38}O_4P$

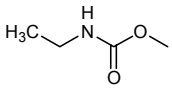


ecamas

(asoprisnili ecamas (89)(50))

ecamate	*N*-ethylcarbamate (ester)
écamate	*N*-éthylcarbamate (ester)
ecamato	*N*-etilcarbamato (éster)

$C_3H_6NO_2$

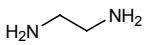


edaminum (70)

edamine	ethane-1,2-diamine
édamine	éthane-1,2-diamine
edamina	etano-1,2-diamina

$C_2H_8N_2$

USAN



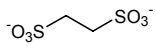
edisilas (18)

edisilate	ethane-1,2-disulfonate
édisilate	éthane-1,2-disulfonate
edisilato	etano-1,2-disulfonato

$C_2H_4O_6S_2$

BAN

USAN: edisylate

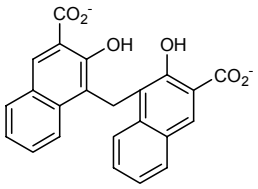


embonas (18)
(cycloguanili embonas (13)(05))
(pararosanilini embonas (15)(06))

embonate	4,4'-methylenebis(3-hydroxynaphthalene-2-carboxylate)
embonate	4,4'-méthylènebis(3-hydroxynaphtalène-2-carboxylate)
embonato	4,4'-metilenbis(3-hidroxinaftaleno-2-carboxilato)

$C_{23}H_{14}O_6$

BAN
USAN: pamoate

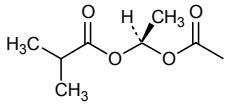


enacarbilum
(gabapentinum enacarbilum (94)(56))

enacarbil	{*rac*-1-[(2-methylpropanoyl)oxy]ethoxy}carbonyl
énacarbil	{*rac*-1-[(2-méthylpropanoyl)oxy]éthoxy}carbonyle
enacarbilo	{*rac*-1-[(2-metilpropanoil)oxy]etoxi}carbonilo

$C_7H_{11}O_4$

JAN



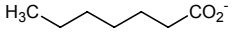
and enantiomer
et énantiomère
y enantiómero

enantas (18)

enantate	heptanoate
énantate	heptanoate
enantato	heptanoato

$C_7H_{13}O_2$

BAN
JAN: enanthate
USAN: enanthate

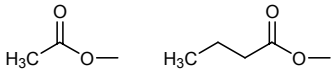


enbutas
(icometasoni enbutas (70)(34))

enbutate	acetate (ester), butanoate (ester)
enbutate	acétate (ester), butanoate (ester)
enbutato	acetato (éster), butanoato (éster)

$C_6H_{10}O_4$

BAN

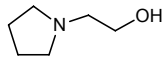


epolaminum (69)

epolamine 2-(pyrrolidin-1-yl)ethanol
épolamine 2-(pyrrolidin-1-yl)éthanol
epolamina 2-(pirrolidin-1-il)etanol

$C_6H_{13}NO$

USAN

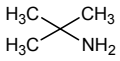


erbuminum (62)

erbumine 2-methylpropan-2-amine
erbumine 2-méthylpropan-2-amine
erbumina 2-metilpropan-2-amina

$C_4H_{11}N$

BAN
JAN
USAN

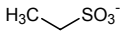


esilas (18)
(trazii esilas (54)(26))

esilate ethanesulfonate
ésilate éthanesulfonate
esilato etanosulfonato

$C_2H_5O_3S$

BAN
USAN: esylate

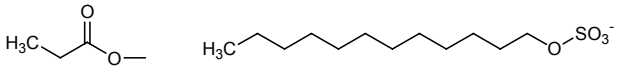


estolas (28)

estolate propanoate (ester), dodecyl sulfate (salt)
estolate propanoate (ester), sulfate de dodécyle (sel)
estolato propanoate (éster), sulfato de dodecilo (sal)

$C_{15}H_{30}O_6S$

USAN

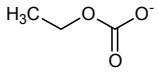


etabonas (64)
(remogliflozini etabonas (98)(60))
(sergliflozini etabonas (98)(59))

etabonate	ethyl carbonate
étabonate	carbonate d'éthyle
etabonato	carbonato de etilo

$C_3H_5O_3$

BAN
JAN
USAN

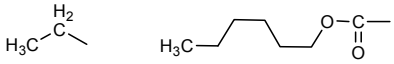


etexilatum
(dabigatranum etexilatum (87)(49))

etexilate	ethyl, (hexyloxy)carbonyl
étexilate	éthyle, (hexyloxy)carbonyle
etexilato	etilo, (hexiloxi)carbonilo

$C_9H_{18}O_2$

JAN

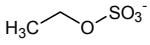


etilsulfas
(mecetronii etilsulfas (51)(24))

etilsulfate	ethyl sulfate
étilsulfate	sulfate d'éthyle
etilsulfato	sulfato de etilo

$C_2H_5O_4S$

USAN: ethylsulfate

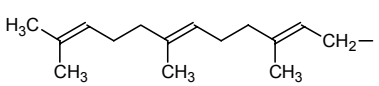


farnesilum (61)

farnesil	(2*E*,6*E*)-3,7,11-trimethyldodeca-2,6,10-trien-1-yl
farnésil	(2*E*,6*E*)-3,7,11-triméthyldodéca-2,6,10-trién-1-yle
farnesilo	(2*E*,6*E*)-3,7,11-trimetildodeca-2,6,10-trien-1-ilo

$C_{15}H_{25}$

JAN

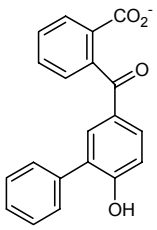


fendizoas (64)

fendizoate	2-(6-hydroxybiphenyl-3-carbonyl)benzoate
fendizoate	2-(6-hydroxybiphényl-3-carbonyl)benzoate
fendizoato	2-(6-hidroxibifenil-3-carbonil)benzoato

$C_{20}H_{13}O_4$

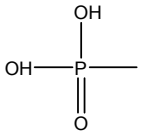
JAN



fosamilum
(ceftarolinum fosamilum (99)(60))

fosamil	phosphono
fosamil	phosphono
fosamilo	fosfono

PO_3H_2

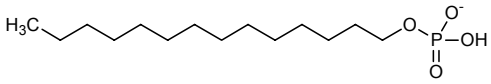


fostedatum (70)

fostedate	tetradecyl hydrogen phosphate
fostédate	hydrogénophosphate de tétradécyle
fostedato	hidrógenofosfato de tetradecilo

$C_{14}H_{30}O_4P$

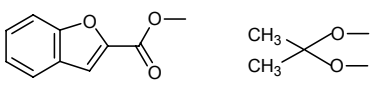
USAN



furetonidum
(triamcinoloni furetonidum (36)(17))

furetonide	1-benzofurane-2-carboxylate (ester), propane-2,2-diylbis(oxy)
furétonide	1-benzofurane-2-carboxylate (ester), propane-2,2-diylbis(oxy)
furetónido	1-benzofurano-2-carboxilato (éster), propano-2,2-diilbis(oxi)

$C_{12}H_{11}O_5$

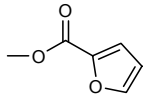


furoas
(fluticasoni furoas (96)(57))

furoate	furan-2-carboxylate (ester)
furoate	furane-2-carboxylate (ester)
furoato	furano-2-carboxilato (éster)

$C_5H_3O_3$

JAN
USAN

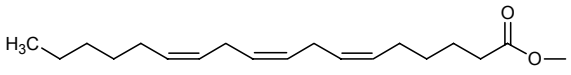


gamolenas
(ascorbyli gamolenas (79)(41))

gamolenate	(6*Z*,9*Z*,12*Z*)-octadeca-6,9,12-trienoate (ester)
gamolénate	(6*Z*,9*Z*,12*Z*)-octadéca-6,9,12-triénoate (ester)
gamolenato	(6*Z*,9*Z*,12*Z*)- octadeca-6,9,12-trienoato (éster)

$C_{18}H_{29}O_2$

BAN

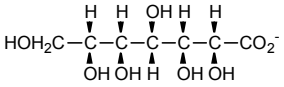


gluceptas (18)

gluceptate	D-*glycero*- D-*gulo*-heptonate
gluceptate	D-*glycéro*- D-*gulo*-heptonate
gluceptato	D-*glicero*-D-*gulo*-heptonato

$C_7H_{13}O_8$

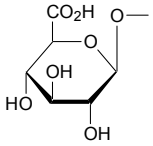
BAN
USAN



glucuronidum
(morphini glucuronidum (92)(54))

glucuronide	β-D-glucopyranosiduronic acid [oside]
glucuronide	acide β-D-glucopyranosiduronique [oside]
glucurónido	ácido β-D-glucopiranosidurónico [ósido]

$C_6H_9O_7$



glutamerum
(hemoglobinum glutamerum (80)(42))

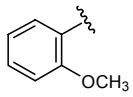
glutamer	glutaraldehyde polymer
glutamère	polymère de glutaraldéhyde
glutámero	polímero de glutaraldehido

$(C_5H_7O_2)_n$

guacilum
(amtolmetinum guacilum (65)(32))

guacil	2-methoxyphenyl
guacil	2-méthoxyphényle
guacilo	2-metoxifenilo

C_7H_7O

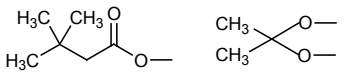


hexacetonidum
(triamcinoloni hexacetonidum (15)(06))

hexacetonide	3,3-dimethylbutanoate (ester), propan-2,2-diylbis(oxy)
hexacétonide	3,3-diméthylbutanoate (ester), propan-2,2-diylbis(oxy)
hexacetónido	3,3-dimetilbutanoato (éster), propan-2,2-diilbis(oxi)

$C_9H_{17}O_4$

BAN
USAN

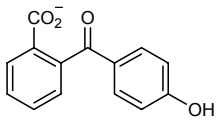


hibenzas (18)

hibenzate	2-(4-hydroxybenzoyl)benzoate
hibenzate	2-(4-hydroxybenzoyl)benzoate
hibenzato	2-(4-hidroxibenzoil)benzoato

$C_{14}H_9O_4$

JAN
USAN: hybenzate



hyclas (62)

hyclate	ethanol – hydrogen chloride - water (½ / 1 / ½)
hyclate	éthanol – chlorure d'hydrogène – eau (½ / 1 / ½)
hiclato	etanol – cloruro de hidrógeno – agua (½ / 1 / ½)

½ ($C_2H_5OH \cdot 2HCl \cdot H_2O$)

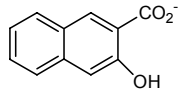
USAN

hydroxynaphthoas
(bephinii hydroxynaphthoas (11)(05))

hydroxynaphthoate	3-hydroxynaphthalene-2-carboxylate
hydroxynaphthoate	3-hydroxynaphtalène-2-carboxylate
hidroxinaftoato	3-hidroxinaftaleno-2-carboxilato

$C_{11}H_7O_3$

BAN

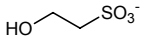


isetionas (18)
(stilbamidini isetionas (04)(03))

isetionate	2-hydroxyethane-1-sulfonate
isétionate	2-hydroxyéthane-1-sulfonate
isetionato	2-hidroxietano-1-sulfonato

$C_2H_5O_4S$

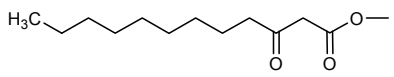
BAN
JAN
USAN: isethionate



ketolauras
(testosteroni ketolauras (16)(07))

ketolaurate	3-oxododecanoate (ester)
kétolaurate	3-oxododécanoate (ester)
cetolaurato	3-oxododecanoato (éster)

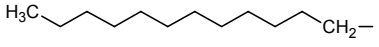
$C_{12}H_{21}O_3$



lauril (41)

lauril	dodecyl
lauril	dodécyle
laurilo	dodecilo

$C_{12}H_{25}$

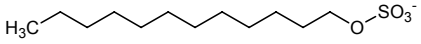


laurilsulfas (24)

laurilsulfate	dodecyl sulfate
laurilsulfate	sulfate de dodécyle
laurilsulfato	sulfato de dodecilo

$C_{12}H_{25}O_4S$

JAN: laurylsulfate
USAN: lauryl sulfate

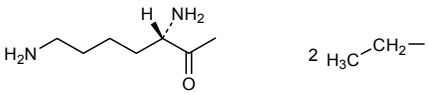


lisetilum
(cromoglicas lisetilum (72)(35))

lisetil	L-lysinyl (ester), diethyl (ester)
lisétil	L-lysinyl (ester), diéthyl (ester)
lisetilo	L-lisinilo (éster), dietilico (éster)

$C_{10}H_{23}N_2O_2$

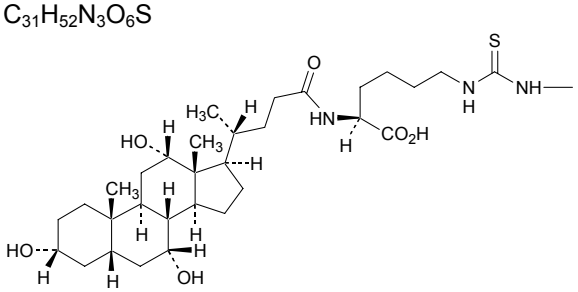
JAN



isicolum
(fluoresceinum lisicolum (89)(51))

lisicol	{*N*-[(5*S*)-5-carboxy-5-(3α,7α,12α-trihydroxy-5β-cholan-24-amido)pentyl]carbamothioyl}amino
lisicol	{*N*-[(5*S*)-5-carboxy-5-(3α,7α,12α-trihydroxy-5β-cholan-24-amido)pentyl]carbamothioyl}amino
lisicol	{*N*-[(5*S*)-5-carboxi-5-(3α,7α,12α-trihidroxi-5β-colan-24-amido)pentil]carbamotioil}amino

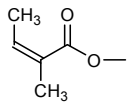
$C_{31}H_{52}N_3O_6S$



mebutatum
(ingenoli mebutatum (101)(62))

mebutate	(2*Z*)-2-methylbut-2-enoate (ester)
mébutate	(2*Z*)-2-méthylbut-2-énoate (ester)
mebutato	(2*Z*)-2-metilbut-2-enoato (éster)

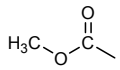
$C_5H_7O_2$



mecarbilum
(omecamtivum mecarbilum (102)(64))

mecarbil	methoxycarbonyl
mécarbil	méthoxycarbonyle
mecarbilo	metoxicarbonilo

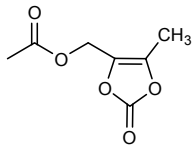
$C_2H_3O_2$



medocarilum
(ceftobiprolum medocarilum (92)(54))

medocaril	[(5-methyl-2-oxo-1,3-dioxol-4-yl)methoxy]carbonyl
médocaril	[(5-méthyl-2-oxo-1,3-dioxol-4-yl)méthoxy]carbonyl
medocarilo	[(5-metil-2-oxo-1,3-dioxol-4-il)metoxi]carbonilo

$C_6H_5O_5$

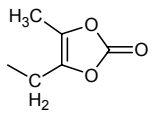


medoxomilum
(olmesartanum medoxomilum (86)(48))
(azilsartanum medoxomilum (98)(59))

medoxomil	(5-methyl-2-oxo-1,3-dioxol-4-yl)methyl
médoxomil	(5-méthyl-2-oxo-1,3-dioxol-4-yl)méthyle
medoxomilo	(5-metil-2-oxo-1,3-dioxol-4-il)metilo

$C_5H_5O_3$

BAN
JAN
USAN

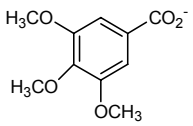


megallas (33)

megallate	3,4,5-trimethoxybenzoate
mégallate	3,4,5-triméthoxybenzoate
megallato	3,4,5-trimetoxibenzoato

$C_{10}H_{11}O_5$

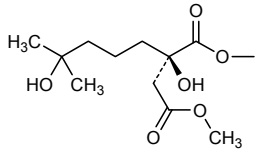
BAN



mepesuccinatum
(omacetaxini mepesuccinas (98)(60))

mepesuccinate	(2*R*)-2,6-dihydroxy-2-(2-methoxy-2-oxoethyl)-6-methylheptanoate (ester)
mépésuccinate	(2*R*)-2,6-dihydroxy-2-(2-méthoxy-2-oxoéthyl)-6-méthylheptanoate (ester)
mepesuccinato	(2*R*)-2,6-dihidroxi-6-metil-2-(2-metoxi-2-oxoetil)heptanoato (éster)

$C_{11}H_{19}O_6$

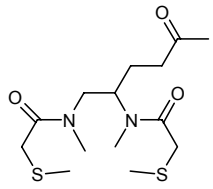


merpentanum
(technetium (^{99m}Tc) nofetumomabum merpentanum (81)(42))

merpentan	[*N*,*N*′-(5-oxopentane-1,2-diyl)bis(2-sulfanylacetamidato)](4–)
merpentan	[*N*,*N*′-(5-oxopentane-1,2-diyl)bis(2-sulfanylacétamidato)](4–)
merpentán	[*N*,*N*′-(5-oxopentano-1,2-diyl)bis(2-sulfanilacetamidato)](4–)

$C_9H_{11}N_2O_3S_2$

USAN



mesilas (18)
(amidefrini mesilas (15)(06))
(sevitropii mesilas (56)(27))

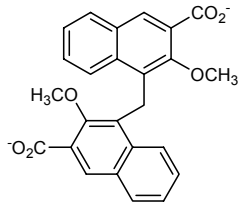
mesilate	methanesulfonate
mésilate	méthanesulfonate
mesilato	metanosulfonato

BAN CH_3O_3S
JAN
USAN: mesylate

metembonas (27)

metembonate 4,4'-methylenebis(3-methoxynaphthalene-2-carboxylate)
métembonate 4.4'-méthylènebis(3-méthoxynaphtalène-2-carboxylate)
metembonato 4,4'-metilenobis(3-metoxinaftaleno-2-carboxilato)

$C_{25}H_{18}O_6$



methonitras
(atropini methonitras (04)(03))

methonitrate *N*-methyl, nitrate (salt)
méthonitrate *N*-méthyl, nitrate (sel)
metonitrato *N*-metil, nitrato (sal)

CH_3NO_3

JAN

$CH_3 - NO_3^-$

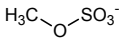
metilsulfas (18)

(laudexii metilsulfas (04)(03))
(diphemanili metilsulfas (04)(03))
(hexocyclii metilsulfas (06)(03))
(poldini metilsulfas (13)(!))
(toloconii metilsulfas (17)(07))
(bevonii metilsulfas (19)(10))
(fenclexonii metilsulfas (20)(08))
(pentapiperii metilsulfas (26)(12))
(rimazolii metilsulfas (26)(12))
(roxolonii metilsulfas (33)(15))
(amezinii metilsulfas (36)(17))
(thiazinamii metilsulfas (36)(17))
(mefenidramii metilsulfas (52)(25))
(tematropii metilsulfas (64)(31))

metilsulfate methyl sulfate
métilsulfate sulfate de méthyle
metilsulfato sulfato de metilo

CH_3O_4S

BAN
JAN



metiodidum
(buzepidi metiodidum (14)(06))

metiodide *N*-methyl, iodide (salt)
métiodure *N*-méthyl, iodure (sel)
metioduro *N*-metilo, ioduro (sal)

CH_3I

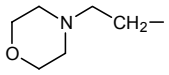
$CH_3 - I^-$

mofetilum (65)

mofetil	2-(morpholin-4-yl)ethyl
mofétil	2-(morpholin-4-yl)éthyle
mofetilo	2-(morfolin-4-il)etilo

$C_6H_{12}NO$

BAN
JAN
USAN

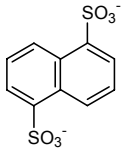


napadisilas (18)
(aclatonii napadisilas (44)(20))

napadisilate	naphthalene-1,5-disulfonate
napadisilate	naphtalène-1,5-disulfonate
napadisilato	naftaleno-1,5-disulfonato

$C_{10}H_6O_6S_2$

BAN
JAN

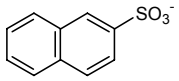


napsilas (18)

napsilate	naphthalene-2-sulfonate
napsilate	naphtalène-2-sulfonate
napsilato	naftaleno-2-sulfonato

$C_{10}H_7O_3S^-$

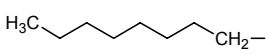
BAN
JAN
USAN: napsylate



octilum (65)

octil	octyl
octil	octyle
octilo	octilo

C_8H_{17}

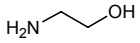


olaminum (22)

olamine 2-aminoethanol
olamine 2-aminoéthanol
olamina 2-aminoetanol

C_2H_7NO

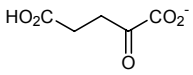
JAN
USAN



oxogluras (22)

oxoglurate hydrogen 2-oxopentanedioate
oxoglurate 2-oxohydrogénopentanedioate
oxoglurato 2-oxohidrógenopentanodioato

$C_5H_5O_5$

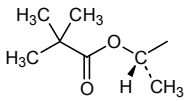


pamoate -> see embonate

pentexilum (65)

pentexil *rac*-1-[(2,2-dimethylpropanoyl)oxy]ethyl
pentexil *rac*-1-[(2,2-diméthylpropanoyl)oxy]éthyle
pentexilo *rac*-1-[(2,2-dimetilpropanoil)oxi]etilo

$C_7H_{13}O_2$



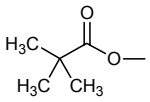
and enantiomer
et énantiomère
y enantiómero

pivalas (18)
(etilefrini pivalas (50)(24))

pivalate 2,2-dimethylpropanoate (ester)
pivalate 2,2-diméthylpropanoate (ester)
pivalato 2,2-dimetilpropanoato (éster)

$C_5H_9O_2$

BAN
JAN
USAN

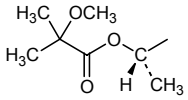


pivoxetilum (54)

pivoxetil	*rac*-1-[(2-methoxy-2-methylpropanoyl)oxy]ethyl
pivoxétil	*rac*-1-[(2-méthoxy-2-méthylpropanoyl)oxy]éthyle
pivoxetilo	*rac*-1-[(2-metoxi-2-metilpropanoil)oxi]etilo

$C_7H_{13}O_3$

BAN
USAN



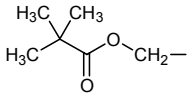
and enantiomer
et énantiomère
y enantiómero

pivoxil (44)
(tebipenemum pivoxilum (87)(46))
(valproatum pivoxilum (51)(24))

pivoxil	[(2,2-dimethylpropanoyl)oxy]methyl
pivoxil	[(2,2-diméthylpropanoyl)oxy]méthyle
pivoxilo	[(2,2-dimetilpropanoil)oxi]metilo

$C_6H_{11}O_2$

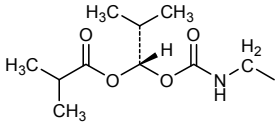
BAN
JAN



placarbilum
(arbaclofenum placarbilum (97)(59))

placarbil	[({(*R*)-2-methyl-1-[(2-methylpropanoyl)oxy]propoxy}carbonyl) amino]methyl
placarbil	[({(*R*)-2-méthyl-1-[(2-méthylpropanoyl)oxy]propoxy}carbonyl) amino]méthyl
placarbilo	[({(*R*)-2-metil-1-[(2-metilpropanoil)oxi]propoxi}carbonil) amino]metilo

$C_{11}H_{21}NO_4$

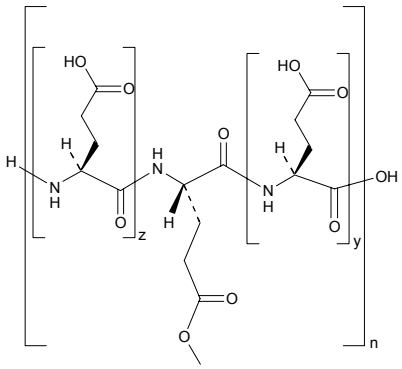


poliglumexum
(paclitaxelum poliglumexum (90)(52))

poliglumex	poly[poly(L-glutamic acid)$_z$—(L-glutamate-γ-ester)—poly (L-glutamic acid)$_y$]$_n$
poliglumex	poly[poly[(acide L-glutamique)$_z$—(L-glutamate-γ-ester)—poly(acide L-glutamique)$_y$]$_n$
poliglumex	poli[poli[(ácido L-glutámico)$_z$—(L-glutamato-γ-éster)—poli(ácido L-glutámico)$_y$]$_n$

$[(C_5H_7NO_3)_z.(C_5H_6NO_3).(C_5H_7NO_3)_y]_n.H_2O$

USAN



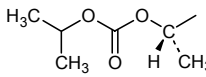
probutate -> see buteprate

proxetilum (58)

proxetil	*rac*-1-{[(propan-2-yloxy)carbonyl]oxy}ethyl
proxétil	*rac*-1-{[(propan-2-yloxy)carbonyl]oxy}éthyle
proxetilo	*rac*-1-{[(propan-2-iloxi)carbonil]oxi}etilo

$C_6H_{11}O_3$

BAN
JAN
USAN



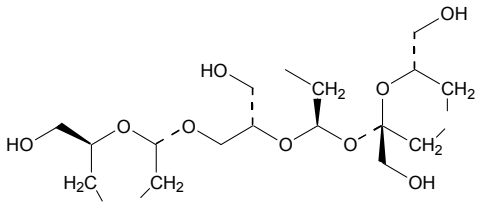
and enantiomer
et énantiomère
y enantiómero

raffimerum
(hemoglobinum raffimerum (89)(51))

raffimer	(2*S*,4*R*,6*R*,8*S*,11*S*,13*S*)-2,4,8,13-tetrakis(hydroxymethyl)-4,6,11-tris(ylomethyl)-3,5,7,10,12-pentaoxatetradecane-1,14-diyl
raffimer	(2*S*,4*R*,6*R*,8*S*,11*S*,13*S*)-2,4,8,13-tétrakis(hydroxyméthyl)-4,6,11-tris(ylométhyl)-3,5,7,10,12-pentaoxatétradécane-1,14-diyle
rafímero	(2*S*,4*R*,6*R*,8*S*,11*S*,13*S*)-2,4,8,13-tetrakis(hidroximetil)-4,6,11-tris(ilometil)-3,5,7,10,12-pentaoxatetradecano-1,14-diilo

$C_{16}H_{29}O_9$

USAN

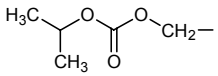


soproxilum (82)

soproxil	{[(propan-2-yloxy)carbonyl]oxy}methyl
soproxil	{[(propan-2-yloxy)carbonyl]oxy}méthyle
soproxilo	{[(propan-2-iloxi)carbonil]oxi}metilo

$C_5H_9O_3$

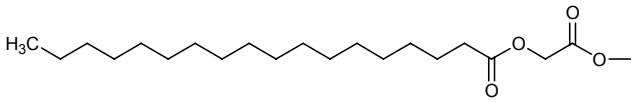
BAN
JAN



steaglas (18)
(prednisoloni steaglas (16)(07))

steaglate	2-(octadecanoyloxy)acetate (ester)
stéaglate	2-(octadécanoyloxy)acétate (ester)
esteaglato	2-(octadecanoiloxi)acetato (éster)

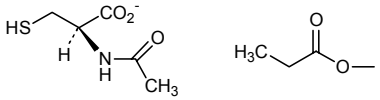
$C_{20}H_{37}O_4$



stinopras
(erythromycini stinopras (58)(27))

stinoprate	*N*-acetyl-L-cysteinate (salt), propanoate (ester)
stinoprate	*N*-acétyl-L-cystéinate (sel), propanoate (ester)
estinoprato	*N*-acetil-L-cisteinato (sal), propanoato (éster)

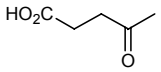
$C_8H_{13}NO_5S$



succinilum
(norfloxacinum succinilum (58)(28))

succinil	3-carboxypropanoyl
succinil	3-carboxypropanoyle
succinilo	3-carboxipropanoilo

$C_4H_5O_3$

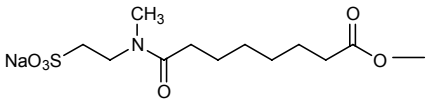


suleptanas
(methylprednisoloni suleptanas (56)(27))

suleptanate	8-[methyl(2-sulfoethyl)amino]-8-oxooctanoate (ester), monosodium salt
suleptanate	8-[méthyl(2-sulfoéthyl)amino]-8-oxooctanoate (ester), sel monosodique
suleptanato	8-[metil(2-sulfoetil)amino]-8-oxooctanoato (éster), sal monosódica

$C_{11}H_{19}NNaO_6$

BN
USAN



sulfoxylas
(phenarsoni sulfoxylas (01)(!))

sulfoxylate	sulfinomethyl, monosodium salt
sulfoxylate	sulfinométhyle, sel monosodique
sulfoxilato	sulfinometilo, sal monosódica

CH_2NaO_2S

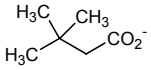
$– CH_2 –SO_2Na$

tebutas (22)

tebutate	3,3-dimethylbutanoate
tébutate	3,3-diméthylbutanoate
tebutato	3,3-dimetilbutanoato

$C_6H_{11}O_2$

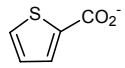
JAN
USAN



tenoas (52)

tenoate — thiophene-2-carboxylate
ténoate — thiophène-2-carboxylate
tenoato — tiofeno-2-carboxilato

$C_5H_3O_2S$

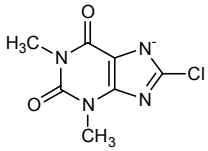


teoclas (18)
(promethazini teoclas (10)(04))

teoclate — 8-chloro-1,3-dimethyl-2,6-dioxo-3,6-dihydro-1*H*-purin-7(2*H*)-ide
téoclate — 8-chloro-1,3-diméthyl-2,6-dioxo-3,6-dihydro-1*H*-purin-7(2*H*)-ure
teoclato — 8-cloro-1,3-dimetil-2,6-dioxo-3,6-dihidro-1*H*-purin-7(2*H*)-uro

$C_7H_6ClN_4O_2$

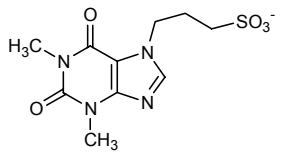
BAN
JAN



teprosilas (29)

teprosilate — 3-(1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7*H*-purin-7-yl)propane-1-sulfonate
téprosilate — 3-(1,3-diméthyl-2,6-dioxo-1,2,3,6-tétrahydro-7*H*-purin-7-yl)propane-1-sulfonate
teprosilato — 3-(1,3-dimetil-2,6-dioxo-1,2,3,6-tetrahidro-7*H*-purin-7-il)propano-1-sulfonato

$C_{10}H_{13}N_4O_5S$

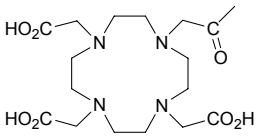


tetraxetanum (92)
(yttrium (^{90}Y) tacatuzumabum tetraxetanum (93)(55))
(yttrium (^{90}Y) clivatuzumabum tetraxetanum (102)(64))

tetraxetan	2-[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclodecan-1-yl]acetyl
tétraxétan	2-[4,7,10-tris(carboxyméthyl)-1,4,7,10-tétraazacyclodécan-1-yl]acétyle
tetraxetán	2-[4,7,10-tris(carboximetil)-1,4,7,10-tetraazaciclodecan-1-il]acetilo

$C_{16}H_{27}N_4O_7^{\cdot}$ (radical)

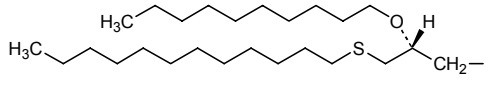
USAN



tidoxilum
(fozivudinum tidoxilum (73)(36))
(fosfluridinum tidoxilum (93)(55))
(fosalvudinum tidoxilum (95)(57))

tidoxil	*rac*-2-(decyloxy)-3-(dodecylsulfanyl)propyl
tidoxil	*rac*-2-(décyloxy)-3-(dodécylsulfanyl)propyle
tidoxilo	*rac*-2-(deciloxi)-3-(dodecilsulfanil)propilo

$C_{25}H_{51}OS$



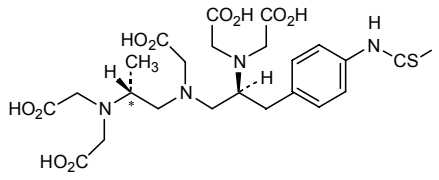
and enantiomer
et énantiomère
y enantiómero

tiuxetanum
(ibritumomabum tiuxetanum (86)(48))

tiuxetan	*N*-(4-{(2*S*)-2-[bis(carboxymethyl)amino]-3-[(2*RS*)-{2-[bis(carboxymethyl)amino]propyl}(carboxymethyl)amino]propyl}=phenyl) thiocarbamoyl
tiuxétan	*N*-(4-{(2*S*)-2-[bis(carboxyméthyl)amino]-3-[(2*RS*)-{2-[bis(carboxyméthyl)amino]propyl}(carboxyméthyl)amino]propyl}=phényl]thiocarbamoyle
tiuxetán	*N*-(4-{(2*S*)-2-[bis(carboximetil)amino]-3-[(2*RS*)-{2-[bis(carboximetil)=amino]propil}(carboximetil)amino]propil}fenil)tiocarbamoilo

$C_{23}H_{31}N_4O_{10}S$

BAN
JAN
USAN



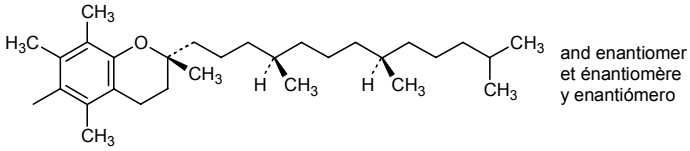
and epimer at C*
et l'épimère en C*
y el epímero en C*

tocoferilum
(tretinoinum tocoferilum (66)(32))

tocoferil	*rac*-(2*R*)-2,5,7,8-tetramethyl-2-[(4*R*,8*R*)-4,8,12-trimethyltridecyl]= chroman-6-yl
tocoféril	*rac*-(2*R*)-2,5,7,8-tétraméthyl-2-[(4*R*,8*R*)-4,8,12-triméthyltridécyl]= chroman-6-yl
tocoferilo	*rac*-(2*R*)-2,5,7,8-tetrametil-2-[(4*R*,8*R*)-4,8,12-trimetiltridecil]= croman-6-ilo

$C_{29}H_{49}O$

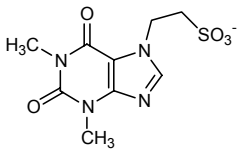
JAN



tofesilas (27)

tofesilate	2-(1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7*H*-purin-7-yl)ethane-1-sulfonate
tofésilate	2-(1,3-diméthyl-2,6-dioxo-1,2,3,6-tétrahydro-7*H*-purin-7-yl)éthane-1-sulfonate
tofesilato	2-(1,3-dimetil-2,6-dioxo-1,2,3,6-tetrahidro-7*H*-purin-7-il)etano-1-sulfonato

$C_9H_{11}N_4O_5S$

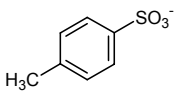


tosilas (18)
(bretylii tosilas (10)(04)) (trethinii tosilas (14)(06))
(itramini tosilas (13)(05))(xylamidini tosilas (17)(!))
(troxonii tosilas (13)(05))(emilii tosilas (37)(17))
(troxypyrrolii tosilas (13)(05)) (suplatasti tosilas (64)(31))

tosilate	4-methylbenzene-1-sulfonate
tosilate	4-méthylbenzène-1-sulfonate
tosilato	4-metilbenceno-1-sulfonato

$C_7H_7O_3S$

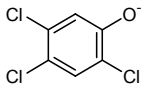
BAN
JAN
USAN: tosylate



triclofenas (18)
(alazanini triclofenas (13)(05))

triclofenate 2,4,5-trichlorophenolate
triclofénate 2,4,5-trichlorophénolate
triclofenato 2,4,5-triclorofenolato

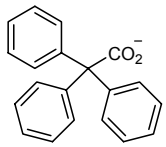
$C_6H_2Cl_3O$



trifenatatas (104)

trifenatate triphenylacetate
trifénatate triphénylacétate
trifenatato trifenilacetato

$C_{20}H_{16}O_2$ (acid)

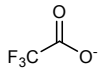


triflutas (64)

triflutate trifluoroacetate
triflutate trifluoroacétate
triflutato trifluoroacetato

$C_2F_3O_2$

USAN

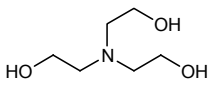


trolaminum (25)

trolamine 2,2',2''-nitrilotriethanol
trolamine 2,2',2''-nitrilotriéthanol
trolamina 2,2',2''-nitrilotrietanol

$C_6H_{15}NO_3$

USAN

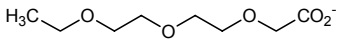


troxundas (46)

troxundate [2-(2-ethoxyethoxy)ethoxy]acetate
troxundate [2-(2-éthoxyéthoxy)éthoxy]acétate
troxundato [2-(2-etoxietoxi)etoxi]acetato

$C_8H_{15}O_5$

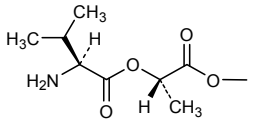
BAN



valactas (101)

valactate (2*S*)-2-[(2*S*)-2-amino-3-methylbutanoyloxy]propanoate
valactate (2S)-2-[(2S)-2-amino-3-méthylbutanoyloxy]propanoate
valactato (2*S*)-2-[(2*S*)-2-amino-3-metilbutanoiloxi]propanoato

$C_8H_{14}NO_4$

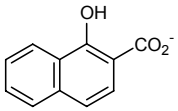


xinafoas (63)

xinafoate 1-hydroxynaphthalene-2-carboxylate
xinafoate 1-hydroxynaphtalène-2-carboxylate
xinafoato 1-hidroxinaftaleno-2-carboxilato

$C_{11}H_7O_3$

BAN
JAN
USAN



* * * * * * * * *

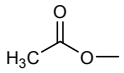
ANNEX 1

The following groups and elements have also been published together with INNs:

acetas

acetate	ethanoate (ester)
acétate	éthanoate (ester)
acetato	etanoato (éster)

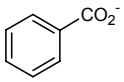
$C_2H_3O_2$



benzoas

benzoate
benzoate
benzoato

$C_7H_5O_2$



bromidum

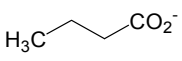
bromide
bromure
bromuro

Br^-

butyras

butyrate	butanoate
butyrate	butanoate
butirato	butanoato

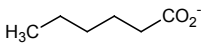
$C_4H_7O_2$



caproas

caproate	hexanoate
caproate	hexanoate
caproato	hexanoato

$C_6H_{11}O_2$



chloridum

chloride
chlorure
cloruro

Cl^-

glycinas

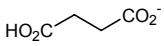
glycinate	2-aminoacetate
glycinate	2-aminoacétate
glicinato	2-aminoacetato

$C_2H_4NO_2$

hemissuccinas

hemisuccinate	hydrogen butanedioate
hémisuccinate	hydrogénobutanedioate
hemisuccinato	hidrógenobutanodioato

$C_4H_5O_4$



iodidum

iodide
iodure
ioduro

I^-

isopropylis

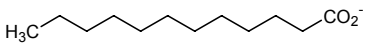
isopropyl	propan-2-yl
isopropyle	propan-2-yle
isopropilo	propan-2-ilo

C_3H_7

lauras

laurate	dodecanoate
laurate	dodécanoate
laurato	dodecanoato

$C_{12}H_{23}O_2$



methylbromidum

methylbromide	*N*-methyl, bromide (salt)
méthylbromure	*N*-méthyl, bromure (sel)
metilbromuro	*N*-metil, bromuro (sal)

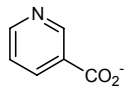
CH_3Br

$H_3C–\quad Br^-$

nicotinas

nicotinate	pyridine-3-carboxylate
nicotinate	pyridine-3-carboxylate
nicotinato	piridina-3-carboxilato

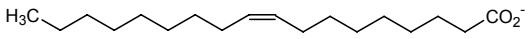
$C_6H_4NO_2$



oleas

oleate	(9*Z*)-octadec-9-enoate
oléate	(9*Z*)-octadéc-9-énoate
oleato	(9*Z*)-octadec-9-enoato

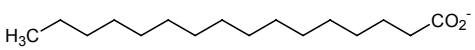
$C_{18}H_{33}O_2$



palmitas

palmitate	hexadecanoate
palmitate	hexadécanoate
palmitato	hexadecanoato

$C_{16}H_{31}O_2$



perchloras

perchlorate
perchlorate
perclorato

ClO_4^-

potassio (kalii)

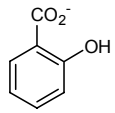
potassium
potassium
(de) potasio

K^+

salicylas

salicylate — 2-hydroxybenzoate
salicylate — 2-hydroxybenzoate
salicilato — 2-hidroxibenzoato

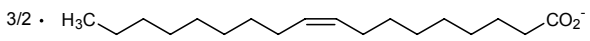
$C_7H_5O_3$



sesquioleas

sesquioleate — (9*Z*)-octadec-9-enoate(1.5)
sesquioléate — (9*Z*)-octadéc-9-énoate(1,5)
sesquioleato — (9*Z*)-octadec-9-enoato(1.5)

$^3/_2 \cdot (C_{18}H_{33}O_2)$



sodio (natrii)

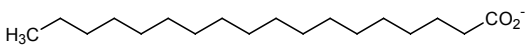
sodium
sodium
(de) sodio

Na^+

stearas

stearate — octadecanoate
stéarate — octadécanoate
estearato — octadecanoato

$C_{18}H_{35}O_2$



sulfas

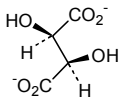
sulfate
sulfate
sulfato

SO_4^{2-}

tartras

tartrate (2*R*,3*R*)-2,3-dihydroxybutanedioate
tartrate (2*R*,3*R*)-2,3-dihydroxybutanedioate
tartrato (2*R*,3*R*)-2,3-dihidroxibutanodioato

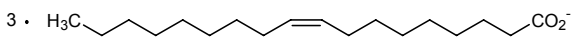
$C_4H_4O_6$



trioleas

trioleate tris[(9*Z*)-octadec-9-enoate]
trioléate tris[(9*Z*)-octadéc-9-énoate]
trioleato tris[(9*Z*)-octadec-9-enoato]

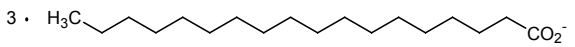
$3 \cdot (C_{18}H_{33}O_2)$



tristearas

tristearate tris(octadecanoate)
tristéarate tris(octadécanoate)
triéstearato tris(octadecanoato)

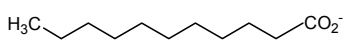
$3 \cdot (C_{18}H_{35}O_2)$



undecylas

undecylate undecanoate
undécylate undécanoate
undecilato undecanoato

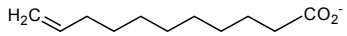
$C_{11}H_{21}O_2$



undecylenas

undecylenate	undec-10-enoate
undécylénate	undéc-10-énoate
undecilenato	undec-10-enoato

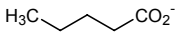
$C_{11}H_{19}O_2$



valeras

valerate	pentanoate
valérate	pentanoate
valerato	pentanoato

$C_5H_9O_2$



* * * * * * * * *

ANNEX 2

Transliteration of Greek letters in English, French and Spanish

Upper case	Lower case	English	French	Spanish
Α	α	alfa (and **not** alpha)	alfa (and **not** alpha)	alfa
Β	β	beta	bêta	beta
Γ	γ	gamma	gamma	gamma
Δ	δ	delta	delta	delta
Ε	ε	epsilon	epsilon	épsilon
Ζ	ζ	zeta	zêta	**dseta**
Η	η	eta	êta	eta
Θ	θ	theta	thêta	**zeta**
Ι	ι	iota	iota	iota
Κ	κ	kappa	kappa	kappa
Λ	λ	lambda	lambda	lambda
Μ	μ	mu	mu	mi
Ν	ν	nu	nu	ni
Ξ	ξ	xi	xi	xi
Ο	ο	omicron	omicron	ómicron
Π	π	pi	pi	pi
Ρ	ρ	rho	rhô	ro
Σ	σ	sigma	sigma	sigma
Τ	τ	tau	tau	tau
Υ	υ	upsilon	upsilon	ípsilon
Φ	φ	phi	phi	fi
Χ	χ	chi	khi	ji
Ψ	ψ	psi	psi	psi
Ω	ω	omega	oméga	omega

ANNEX 3

Standardization of the Spanish version of INN

The spelling of the Spanish version of the INN has been standardized in collaboration with a Spanish nomenclature group and the WHO Secretariat (1, 2).

The criteria for standardization may be summarized as follows:
1. keep as close as possible to the present INN (minimum changes)
2. keep "stems" uniform
3. avoid lengthening of words
4. base changes on a combination of:
   - 4.1 acceptance wherever possible of the English and/or French (original) name
   - 4.2 acceptance wherever possible of the existing Spanish name
   - 4.3 consideration of the Spanish phonetics and spelling in special cases.

Rules for the Spanish version of the INN

English	***Spanish***	
-ac	-aco	
-am	-am	
-ame	-amo	
-an	-an	except: -orfano, -sulfano, -oxano
-ane	-ano	except: insulina defalana/insulina isofana
-ase	-asa	
-at	-at	
-ate	-ato	
-barb	-barbo	
benze	bence	
benzi	benci	
chlo	clo	
-cort	-cort	
-d	-d	
-el	-el	
-em	-em	
-en(e)	-eno	except: -ben, -bufen, -gene (gén), -rsen (-rsén)
-er	-ero	
-et	-et	
-ex	-ex	
-f	-f	
-fos or -phos	-fos	
-ic	-ico	
-ide	-ida	except: -óxido, -ósido, -glusido, iodide (ioduro), chloride (cloruro), etc.
-il (e) and –yl	–ilo	except: -dil, -pril, -guanil, -azenil
-ime	-ima	
-in (e)	-ina	except: -dipino, -nixino, -oxacino, -platino
-ir	-ir	
-it(e)	-ita	except: -arit
-ium	-io	
k-	k-	
-ka-	-ca-	except: -kacina, -kalim, -lukast
-ke-	-que-	except: -kefamide
khe	ke	

-ki-	-qui-	except: leukina, rokitamicina
-ko-	-co-	
-ku-	-cu-	
-ky-	-qui-	
-ll-	-l-	
-mf-	-mf-[1]	except: anfetaminas (derivatives), alcanfor (derivatives), cloranfenicol (derivatives and analogues)
-nb-	-nb-[1]	
-nf-	-nf-	
-np-	-np-[1]	
-ol(e)	-ol	
-om	-om	
-ome	-omo	except: cef..oma
-on	-on	
-one	-ona	
-ou-	-u-	
-pafant	-pafant	
ph	f	
-prim	-prima	
qua-	qua-	
-qua-	-cua-	
quo-	quo-	
-quo-	-cuo-	
sf-	esf-	
sp-	esp-	
-st	-st	
st-	est-	
-stim	-stim	
th	t	
y	i	
z	z	
zinc	zinc	

[1]While *st-* and *sp-* are changed into *est-* and *esp-* respectively, the letter sequences *–mf-, -nb-,* and
–np-, although unusual in Spanish have been retained for the following reasons:
(a) international linguistic requirements; the established philosophy takes precedence over spelling
(b) correspondence with the English and French versions; fewer changes to the first Spanish versions (previous cumulative lists).

Last update July 2010

References

1. Dal Re Saavedra, M.A. et al. Propuesta de unificación de las denominaciones comunes internacionales de las sustancias farmacéuticas en lengua española. [Proposal for unification of the international nonproprietary names for pharmaceutical substances in the Spanish language.] *Anales de la Real Academia de Farmacia*, 1985, **51**:289-300:
2. Comments on Appendix to: article on "Unificación de las denominaciones comunes internacionales de las sustancias farmacéuticas" and on listing received in Madrid in September 1985 (Pharm S/Nom 1105 and 1105 Add: 1).

ANNEX 4

4-1- Names for toxins (active or inactivated proteins)

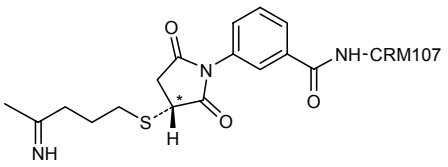
aldifitoxum

(transferrinum aldifitoxum (95)(56))

aldifitox 3-{*rac*-3-[(4-imino-4-ylobutyl)sulfanyl]-2,5-dioxopyrrolidin-1-yl}phenylcarbonyl and forming an *N*-benzoyl derivative of a primary amine group of diphtheria [550-L-phenylalanine]toxin from *Corynebacterium diphtheriae*-(26-560)-peptide

aldifitox 3-{*rac*-3-[(4-imino-4-ylobutyl)sulfanyl]-2,5-dioxopyrrolidin-1-yl}phénylcarbonyle lié par une fonction benzamide à une amine primaire du [550-L-phénylalanine]toxine diphtérique de *Corynebacterium diphteriae*-(26-560)-peptide

aldifitox 3-{*rac*-3-[(4-imino-4-ilobutil)sulfanil]-2,5-dioxopirrolidin-1-il}fenilcarbonilo ligado por una función benzamida a una amina primaria de la [550-L-fenilalanina]toxina diftérica del *Corynebacterium diphteriae*-(26-560)-péptido



and epimer at C*
et l'épimère en C*
y el epímero al C*

H_2N-CRM107= GADDVVDSSK SFVMENFSSY HGTKPGYVDS IQKGIQKPKS
GTQGNYDDDW KGFYSTDNKY DAAGYSVDNE NPLSGKAGGV
VKVTYPGLTK VLALKVDNAE TIKKELGLSL TEPLMEQVGT
EEFIKRFGDG ASRVVLSLPF AEGSSSVEYI NNWEQAKALS
VELEINFETR GKRGQDAMYE YMAQACAGNR VRRSVGSSLS
CINLDWDVIR DKTKTKIESL KEHGPIKNKM SESPNKTVSE
EKAKQYLEEF HQTALEHPEL SELKTVTGTN PVFAGANYAA
WAVNVAQVID SETADNLEKT TAALSILPGI GSVMGIADGA
VHHNTEEIVA QSIALSSLMV AQAIPLVGEL VDIGFAAYNF
VESIINLFQV VHNSYNRPAY SPGHKTQPFL HDGYAVSWNT
VEDSIIRTGF QGESGHDIKI TAENTPLPIA GVLLPTIPGK
LDVNKSKTHI SVNGRKIRMR CRAIDGDVTF CRPKSPVYVG
NGVHANLHVA FHRSSSEKIH SNEISSDSIG VLGYQKTVDH
TKVNFKLSLF FEIKS

aritoxum

(dorlimomabum aritoxum (66)(32))
(telimomabum aritoxum (66)(32))
(zolimomabum aritoxum (80)(41))

aritox ricin A chain
aritox chaîne A de la ricine
aritox cadena A de la ricina

besudotoxum

(cintredekinum besudotoxum (92)(54))

besudotox L-lysyl-L-alanyl-L-serylglycylglycine (linker) fusion protein with des-(365-380)-[Asn^{364},Val^{407},Ser^{515},Gln^{590},Gln^{606},Arg^{613}]exotoxin A (*Pseudomonas aeruginosa*)-(251-613)-peptide (toxin with region IA and first 16 residues of region IB deleted)

bésudotox L-lysyl-L-alanyl-L-sérylglycylglycine (peptide de liaison) protéine de fusion avec le dès-(365-380)-[Asn^{364},Val^{407},Ser^{515},Gln^{590},Gln^{606},Arg^{613}]exotoxine A (*Pseudomonas aeruginosa*)-(251-613)-peptide (toxine dont la région IA et les 16 premiers résidus de la région IB ont été supprimés)

besudotox L-lisil-L-alanil-L-serilglicilglicina (péptido de enlace) proteína de fusión con el des-(365-380)-[Asn^{364},Val^{407},Ser^{515},Gln^{590},Gln^{606},Arg^{613}]exotoxina A (*Pseudomonas aeruginosa*)-(251-613)- péptido (toxina de la que se han suprimido la región IA y les 16 primeros restos de la región IB)

$C_{1668}H_{2604}N_{492}O_{520}S_2$

KASGGPEGGS	LAALTAHQAC	HLPLETFTRH	RQPRGWEQLE	QCGYPVQRLV	50
ALYLAARLSW	NQVDQVIRNA	LASPGSGGDL	GEAIREQPEQ	ARLALTLAAA	100
ESERFVRQGT	GNDEAGAANG	PADSGDALLE	RNYPTGAEFL	GDGGDVSFST	150
RGTQNWTVER	LLQAHRQLEE	RGYVFVGYHG	TFLEAAQSIV	FGGVRARSQD	200
LDAIWRGFYI	AGDPALAYGY	AQDQEPDARG	RIRNGALLRV	YVPRSSLPGF	250
YRTSLTLAAP	EAAGEVERLI	GHPLPLRLDA	ITGPEEEGGR	LETILGWPLA	300
ERTVVIPSAI	PTDPRNVGGD	LDPSSIPDQE	QAISALPDYA	SQPGQPPRED	350
LR					352

Disulfide bridge location / Position du pont disulfure / Posición del puente disulfuro

20-42

bogatoxum

(citatuzumabum bogatoxum (99)(61))

bogatox 12-mer linker [furin proteolytic cleavage site from *Pseudomonas* exotoxin A (298-309 precursor fragment)] (1-12) -*Bougainvillea spectabilis* Willd bouganin [rRNA N-glycosidase, type I ribosome inactivating protein (RIP)] fragment (27-276 from precursor, V149>A, D153>A, Y159>N, I78>A) (13-262)

bogatox 12-mer linker [site de clivage protéolytique par la furine, de *Pseudomonas* exotoxine A (fragment 298-309 du précurseur)] (1-12) -fragment de la bouganine [N-glycosidase de l'ARNr, protéine de type I inactivant le ribosome (RIP)] de *Bougainvillea spectabilis* Willd (27-276 du précurseur, V149>A, D153>A, Y159>N, I178>A) (13-262)

bogatox 12-mero de enlace [secuencia de ruptura proteolítica por furina, de la exotoxina A de *Pseudomonas* (fragmento 298-309 del precursor)] (1-12) -fragmento de la buganina [N-glicosidasa de ARNr, proteína de tipo I inactivadora de ribosomas (RIP)] de *Bougainvillea spectabilis* Willd (27-276 del precursor, V149>A, D153>A, Y159>N, I178>A) (13-262)

```
TRHRQPRGWE  QLYNTVSFNL  GEAYEYPTFI  QDLRNELAKG  TPVCQLPVTL  50
QTIADDKRFV  LVDITTTSKK  TVKVAIDVTD  VYVVGYQDKW  DGKDRAVFLD  100
KVPTVATSKL  FPGVTNRVTL  TFDGSYQKLV  NAAKADRKAL  ELGVNKLEFS  150
IEAIHGKTIN  GQEAAKFFLI  VIQMVSEAAR  FKYIETEVVD  RGLYGSFKPN  200
FKVLNLENNW  GDISDAIHKS  SPQCTTINPA  LQLISPSNDP  WVVNKVSQIS  250
PDMGILKFKS  SK                                  262
```

cridificarum

vanutidum cridificarum (100)(62)

cridificar [$N^{6\text{-Lys}}$-(sulfanylacetyl)]-[52-glutamic acid(G>E)]diphtheria toxin *Corynebacterium diphtheriae*

cridificar [$N^{6\text{-Lys}}$-(sulfanylacétyl)]-[52-acide glutamique(G>E)]toxine diphtérique *Corynebacterium diphtheriae*

cridificar [$N^{6\text{-Lys}}$-(sulfanilacetil)]-[52-ácido glutámico G>E)]toxina diftérica *Corynebacterium diphtheriae*

```
GADDVVDSSK  SFVMENFSSY  HGTKPGYVDS  IQKGIQKPKS  GTQGNYDDDW   50
KEFYSTDNKY  DAAGYSVDNE  NPLSGKAGGV  VKVTYPGLTK  VLALKVDNAE  100
TIKKELGLSL  TEPLMEQVGT  EEFIKRFGDG  ASRVVLSLPF  AEGSSSVEYI  150
NNWEQAKALS  VELEINFETR  GKRGQDAMYE  YMAQACAGNR  VRRSVGSSLS  200
CINLDWDVIR  DKTKTKIESL  KEHGPIKNKM  SESPNKTVSE  EKAKQYLEEF  250
HQTALEHPEL  SELKTVTGTN  PVFAGANYAA  WAVNVAQVID  SETADNLEKT  300
TAALSILPGI  GSVMGIADGA  VHHNTEEIVA  QSIALSSLMV  AQAIPLVGEL  350
VDIGFAAYNF  VESIINLFQV  VHNSYNRPAY  SPGHKTQPFL  HDGYAVSWNT  400
VEDSIIRTGF  QGESGHDIKI  TAENTPLPIA  GVLLPTIPGK  LDVNKSKTHI  450
SVNGRKIRMR  CRAIDGDVTF  CRPKSPVYVG  NGVHANLHVA  FHRSSSEKIH  500
SNEISSDSIG  VLGYQKTVDH  TKVNSKLSLF  FEIKS                  535
```

diftitoxum

(denileukinum diftitoxum (78)(40))

diftitox *N*-L-methionyl[387-L-histidine-388-L-alanine]-(1-388)-toxin (*Corynebacterium diphtheriae* strain C7) (388→2')-protein

diftitox *N*-L-méthionyl[387-L-histidine-388-L-alanine]-(1-388)-toxine (souche C7 de *Corynebacterium diphtheriae*)-(388→2')

diftitox *N*-L-metionil[387-L-histidina-388-L-alanina]-(1-388)-toxina (cepa C7 de *Corynebacterium diphtheriae*) (388→2')

USAN

estafenatoxum

(naptumomabum estafenatoxum (96)(58))

estafenatox glycylglycyl-L-proline (linker) fusion protein with enterotoxin type A (*Staphylococcus aureus*)-(1-33)-peptidyl-L-seryl[Ser^{36},Ser^{37},Glu^{38},Lys^{39},Ala^{41}, Thr^{46},Thr^{71},Ala^{72},Ser^{75},Glu^{76},Glu^{78},Ser^{80},Ser^{81},Thr^{214},Ser^{217},Thr^{219},Ser^{220}, Ser^{222},Ser^{224}]enterotoxin type E (*Staphylococcus aureus*)-(32-230)-peptide (synthetic superantigen SEA/E-120)

estafénatox glycylglycyl-L-proline (peptide de liaison) protéine de fusion avec l'entérotoxine type A (*Staphylococcus aureus*)-(1-33)-peptidyl-L-séryl[Ser^{36},Ser^{37},Glu^{38},Lys^{39}, Ala^{41},Thr^{46},Thr^{71},Ala^{72},Ser^{75},Glu^{76},Glu^{78},Ser^{80},Ser^{81},Thr^{214},Ser^{217},Thr^{219},Ser^{220}, Ser^{222},Ser^{224}]entérotoxine type E (*Staphylococcus aureus*)-(32-230)-peptide (superantigène SEA/E-120 synthétique)

estafenatox glicilglicil-L-prolina (péptido de enlace) proteína de fusión con la enterotoxina típo A (*Staphylococcus aureus*)-(1-33)-peptidil-L-seril[Ser^{36},Ser^{37},Glu^{38},Lys^{39}, Ala^{41},Thr^{46},Thr^{71},Ala^{72},Ser^{75},Glu^{76},Glu^{78},Ser^{80},Ser^{81},Thr^{214},Ser^{217},Thr^{219}, Ser^{220},Ser^{222},Ser^{224}]enterotoxina tipo E (*Staphylococcus aureus*)-(32-230)-péptido (superantígeno SEA/E-120 sintético)

$C_{1173}H_{1805}N_{305}O_{374}S_3$

```
GGPSEKSEEI  NEKDLRKKSE  LQGTALGNLK  QIYYYNSKAI  TSSEKSADQF   50
LTNTLLFKGF  FTGHPWYNDL  LVDLGSTAAT  SEYEGSSVDL  YGAYYGYQCA  100
GGTPNKTACM  YGGVTLHDNN  RLTEEKKVPI  NLWIDGKQTT  VPIDKVKTSK  150
KEVTVQELDL  QARHYLHGKF  GLYNSDSFGG  KVQRGLIVFH  SSEGSTVSYD  200
LFDAQGQYPD  TLLRIYRDNT  TISSTSLSIS  LYLYTT                 236
```

Disulfide bridge location / Position du pont disulfure / Posición del puente disulfuro

99-109

mafenatoxum

(anatumomabum mafenatoxum (86)(48))

mafenatox [227-L-alanine]enterotoxin A (*Staphylococcus aureus*)
mafénatox [227-L-alanine]entérotoxine A (*Staphylococcus aureus*)
mafenatox [227-L-alanina]enterotoxina A de *Staphylococcus aureus*

monatoxum

(oportuzumabum monatoxum (100)(62))

monatox 20-mer linker (1-20) -*Pseudomonas aeruginosa* exotoxin A (ETA) fragment [277-633 precursor fragment, containing domain II (281-393) with furin proteolytic cleavage site (298-309), domain Ib I432>V (394-433), domain III (434-633)] (21-377) -hexahistidyl-lysyl-aspartyl-glutamyl-leucyl (378-387)

monatox 20-mer linker (1-20) -fragment de l'exotoxine A de *Pseudomonas aeruginosa* (ETA) [fragment 277-633 du précurseur, comprenant le domaine II (281-393) dont le site de clivage protéolytique par la furine (298-309), le domaine Ib I432>V (394-433), le domaine III (434-633)] (21-377) -hexahistidyl-lysyl-aspartyl-glutamyl-leucyl (378-387)

monatox 20-mero de enlace (1-20) -fragmento de la exotoxina A de *Pseudomonas aeruginosa* (ETA) [fragmento 277-633 del precursor, que comprende el dominio II (281-393), que incluye la secuencia de ruptura proteolítica por furina (298-309), el dominio Ib I432>V (394-433), el dominio III (434-633)] (21-377) -hexahistidil-lisil-aspartil-glutamil-leucil (378-387)

```
EFGGAPEFPK   PSTPPGSSGL   EGGSLAALTA   HQACHLPLET   FTRHRQPRGW   50
EQLEQCGYPV   QRLVALYLAA   RLSWNQVDQV   IRNALASPGS   GGDLGEAIRE   100
QPEQARLALT   LAAAESERFV   RQGTGNDEAG   AASADVVSLT   CPVAAGECAG   150
PADSGDALLE   RNYPTGAEFL   GDGGDVSFST   RGTQNWTVER   LLQAHRQLEE   200
RGYVFVGYHG   TFLEAAQSIV   FGGVRARSQD   LDAIWRGFYI   AGDPALAYGY   250
AQDQEPDARG   RIRNGALLRV   YVPRSSLPGF   YRTGLTLAAP   EAAGEVERLI   300
GHPLPLRLDA   ITGPEEEGGR   LETILGWPLA   ERTVVIPSAI   PTDPRNVGGD   350
LDPSSIPDKE   QAISALPDYA   SQPGKPPHHH   HHHKDEL                   387
```

paptoxum

(taplitumomabum paptoxum (84)(46))

paptox protein PAP (*Phytolacca americana* antiviral)
paptox protéine antivirale extraite du *Phytolacca americana* (PAP)
paptox proteína PAP (proteína antiviral de *Phytolacca americana*)

pasudotoxum

(moxetumomabum pasudotoxum (102)(64))

pasudotox 6-mer linker (1-6) -*Pseudomonas aeruginosa* exotoxin A (ETA) PE38 fragment [276-638 precursor fragment with del 390-405, containing domain II S389>N (281-389) with furin proteolytic cleavage site (298-309), domain Ib I432>V (406-433), domain III (434-638)] (7-353)

pasudotox 6-mer linker (1-6) -fragment PE38 de l'exotoxine A de *Pseudomonas aeruginosa* (ETA) [fragment 276-638 du précurseur avec del 390-405, comprenant le domaine II S389>N (281-389) dont le site de clivage protéolytique par la furine (298-309), le domaine Ib I432>V (406-433), le domaine III (434-638)] (7-353)

pasudotox 6-mero de enlace (1-6)-fragmento PE38 de la exotoxina A de *Pseudomonas aeruginosa* (ETA) [fragmento 276-638 del precursor con del 390-405, que comprende el dominio II S389>N (281-389), que incluye la secuencia de ruptura proteolítica por furina (298-309), el dominio Ib I432>V (406-433), el dominio III (434-638)] (7-353)

```
AKASGGPEGG   SLAALTAHQA   CHLPLETFTR   HRQPRGWEQL   EQCGYPVQRL   50
VALYLAARLS   WNQVDQVIRN   ALASPGSGGD   LGEAIREQPE   QARLALTLAA   100
AESERFVRQG   TGNDEAGAAN   GPADSGDALL   ERNYPTGAEF   LGDGGDVSFS   150
TRGTQNWTVE   RLLQAHRQLE   ERGYVFVGYH   GTFLEAAQSI   VFGGVRARSQ   200
DLDAIWRGFY   IAGDPALAYG   YAQDQEPDAR   GRIRNGALLR   VYVPRSSLPG   250
FYRTSLTLAA   PEAAGEVERL   IGHPLPLRLD   AITGPEEEGG   RLETILGWPL   300
AERTVVIPSA   IPTDPRNVGG   DLDPSSIPDK   EQAISALPDY   ASQPGKPPRE   350
DLK
```

sudotoxum

(alvirceptum sudotoxum (69)(34))

sudotox [248-L-histidine-249-L-methionine-250-L-alanine-251-L-glutamic acid]-(248-613)-exotoxin A (*Pseudomonas aeruginosa* reduced)

sudotox [248-L-histidine-249-L-méthionine-250-L-alanine-251-acide L-glutamique]-(248-613)-exotoxine A (*Pseudomonas aeruginosa* réduite)

sudotox [248-L-histidina-249-L-metionina-250-L-alanina-251-ácidoL-glutámico]-(248-613)-exotoxina A (*Pseudomonas aeruginosa* reducida)

USAN

tafenatoxum
(nacolomabum tafenatoxum (80)(41))

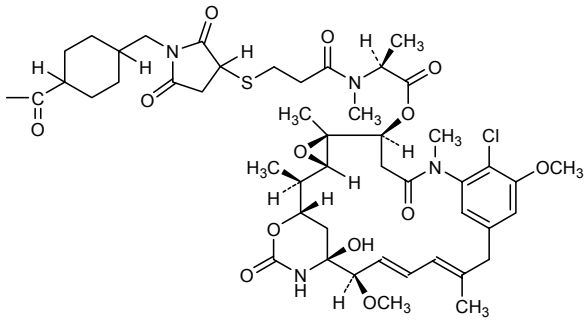
tafenatox	enterotoxin A (*Staphylococcus aureus*)
tafénatox	entérotoxine A (*Staphylococcus aureus*)
tafenatox	enterotoxina A (*Staphylococcus aureus*)

4-2- Designations for selected active moieties*

emtansinum
(trastuzumabum emtansinum (103))

emtansine	4-({3-[(3-{[(1*S*)-2-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-dimethoxy-2,5,9,16-tetramethyl-8,23-dioxo-4,24-dioxa-9,22-diazatetracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-yl]oxy}-1-methyl-2-oxoethyl]methylamino}-3-oxopropyl)sulfanyl]-2,5-dioxopyrrolidin-1-yl}methyl)cyclohexylcarbonyle
emtansine	4-({3-[(3-{[(1*S*)-2-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-diméthoxy-2,5,9,16-tétraméthyl-8,23-dioxo-4,24-dioxa-9,22-diazatétracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaén-6-yl]oxy}-1-méthyl-2-oxoéthyl]méthylamino}-3-oxopropyl)sulfanyl]-2,5-dioxopyrrolidin-1-yl}méthyl)cyclohexylcarbonyle
emtansina	4-({3-[(3-{[(1*S*)-2-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-cloro-21-hidroxi-12,20-dimetoxi-2,5,9,16-tetrametil-8,23-dioxo-4,24-dioxa-9,22-diazatetraciclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-il]oxi}-1-metil-2-oxoetil]metilamino}-3-oxopropil)sulfanil]-2,5-dioxopirrolidin-1-il}metil)ciclohexilcarbonilo

$C_{47}H_{62}ClN_4O_3S$



mertansinum

(cantuzumabum mertansinum (89)(51))
(lorvotuzumabum mertansinum (103))

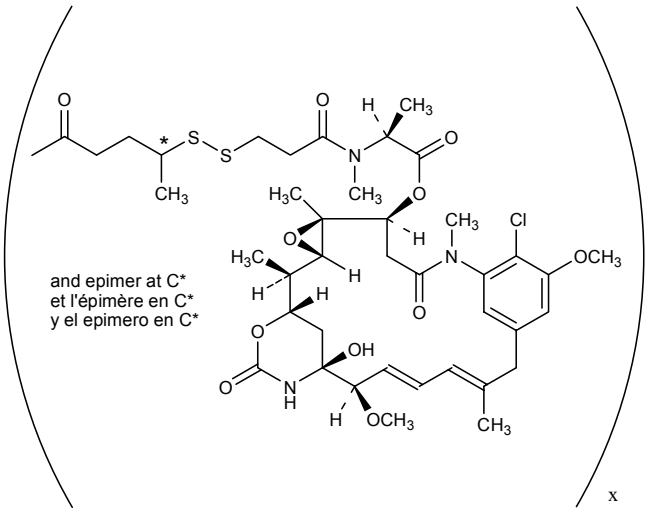
mertansine x(4*RS*)-4[(3-{[(1*S*)-2-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-dimethoxy-2,5,9,16-tetramethyl-8,23-dioxo-4,24-dioxa-9,22-diazatetracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-yl]oxy}-1-methyl-2-oxoethyl]methylamino}-3-oxopropyl)disulfanyl]pentanoyl}

mertansine x{(4*RS*)-4[(3-{[(1*S*)-2-{[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-chloro-21-hydroxy-12,20-diméthoxy-2,5,9,16-tétraméthyl-8,23-dioxo-4,24-dioxa-9,22-diazatétracyclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaén-6-yl]oxy-1-méthyl-2-oxoéthyl]méthylamino}-3-oxopropyl)disulfanyl]pentanoyle}

mertansina x{(4*RS*)-4-[[3-[[(1*S*)-2-[[(1*S*,2*R*,3*S*,5*S*,6*S*,16*E*,18*E*,20*R*,21*S*)-11-cloro-21-hidroxi-2,5,9,16-tetrametil -12,20-dimetoxi-4,24-dioxa-8,23-dioxo-9,22-diazatetraciclo[19.3.1.1^{10,14}.0^{3,5}]hexacosa-10,12,14(26),16,18-pentaen-6-il]oxi]-1-metil-2-oxoetil]metilamino]-3-oxopropil]disulfanil]pentanoilo}

$(C_{40}H_{55}N_3O_{11}S_2Cl)_4$

USAN



vedotinum

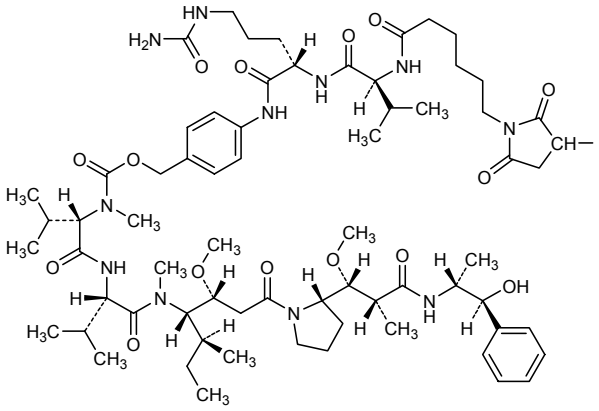
(brentuximabum vedotinum (103))

vedotine 1-(6-{[(2*S*)-1-({(2*S*)-5-carbamoylamino-1-[(4-{[(2*S*)-{[(2*S*)-1-{[(3*R*,4*S*,5*S*)-1-{(2*S*)-2-[(1*R*,2*R*)-3-{[(1*S*,2*R*)-1-hydroxy-1-phenylpropan-2-yl]amino}-1-methoxy-2-methyl-3-oxopropyl]pyrrolidin-1-yl}-3-methoxy-5-methyl-1-oxoheptan-4-yl](methyl)amino}-3-methyl-1-oxobutan-2-yl]amino}-3-methyl-1-oxobutan-2-yl]methylcarbamoyloxy}phenyl)amino]-1-oxopentan-2-yl}amino)-3-methyl-1-oxobutan-2-yl]amino}-6-oxohexyl)-2,5-dioxopyrrolidin-3-yl

védotine 1-(6-{[(1*S*)-1-{[(1*S*)-4-(carbamoylamino)-1-({4-[({[(1*S*)-1-{[(1*S*)-1-({(1*S*,2*R*)-4-{(2*S*)-2-[(1*R*,2*R*)-3-{[(1*R*,2*S*)-2-hydroxy-1-méthyl-2-phényléthyl]amino}-1-méthoxy-2-méthyl-3-oxopropyl]pyrrolidin-1-yl}-2-méthoxy-1-[(1*S*)-1-méthylpropyl]-4-oxobutyl}méthylcarbamoyl)-2-méthylpropyl]carbamoyl}-2-méthylpropyl]méthylcarbamoyl}oxy)méthyl]phényl}carbamoyl)butyl]carbamoyl}-2-méthylpropyl]amino}-6-oxohexyl)-2,5-dioxopyrrolidin-3-yle

vedotina 1-(6-{[(1*S*)-1-{[(1*S*)-4-(carbamoilamino)-1-({4-[({[(1*S*)-1-{[(1*S*)-1-({(1*S*,2*R*)-4-{(2*S*)-2-[(1*R*,2*R*)-3-{[(1*R*,2*S*)-2-hidroxi-1-metil-2-feniletil]amino}-2-metil-1-metoxi-3-oxopropil]pyrrolidin-1-yl}-1-[(1*S*)-1-metilpropil-2-metoxi]-4-oxobutil}metilcarbamoil)-2-metilpropil]carbamoil}-2-metilpropil]metilcarbamoil}oxi)metil]fenil}carbamoil)butil]carbamoil}-2-metilpropil]amino}-6-oxohexil)-2,5-dioxopirrolidin-3-ilo

$C_{68}H_{106}N_{11}O_{15}$



* Kindly note that this list is not exhaustive.

4-3- Insulin qualifiers

arginum
(insulinum arginum (58)(28))

argine	B30-yl-L-arginyl-L-arginine
argine	B30-yl-L-arginyl-L-arginine
argina	B30-il-L-arginil-L-arginina
	$C_{12}H_{25}N_8O_3$

USAN

aspartum
(insulinum aspartum (76)(38))

aspart	[B28-L-aspartic acid]
asparte	[B28-L-acide aspartique]
asparta	[B28-L-ácido aspártico]

JAN
USAN

dalanatum
(insulinum dalanatum (14)(06))

dalanated	des-B30-alanine
dalanatée	dés-B30-alanine
dalanatada	des-B30-alanina

degludecum
(insulinum degludecum (101)(63))

degludec	$N^{6,\,B29}$-[*N*-(15-carboxypentadecanoyl)-L-γ-glutamyl]-des-30B-L-threonine
dégludec	$N^{6,\,B29}$-[*N*-(15-carboxypentadécanoyl)-L-γ-glutamyl]-dès-30B-L-thréonine
degludec	$N^{6,\,B29}$-[*N*-(15-carboxipentadecanoil)-L-γ-glutamil]-des-30B-L-treonina

defalanum
(## insulinum defalanum (37)(!))

defalan	des-B1-phenylalanine
défalan	dés-B1-phénylalanine
defalán	des-B1-fenilalanina

detemirum
(insulinum detemirum (80)(42))

detemir	$N^{6,B29}$-tetradecanoyl-des-B30-L-threonine
détémir	$N^{6,B29}$-tétradécanoyl-dés-B30-L-thréonine
detemir	$N^{6,B29}$-tetradecanoil-des-B30-L-treonina

BAN
JAN
USAN

glarginum
(insulinum glarginum (76)(38))

glargine	[A21-glycine], B30-yl-L-arginyl-L-arginine
glargine	[A21-glycine], B30-yl-L-arginyl-L-arginine
glargina	[A21-glicina], B30-il-L-arginil-L-arginina

BAN
JAN
USAN

glulisinum
(insulinum glulisinum (84)(46))

glulisine	[B3-lysine, B29-glutamic acid]
glulisine	[B3-lysine, B29-acide glutamique]
glulisina	[B3-lisina, B29-ácido glutámico]

USAN

lisprum
(insulinum lisprum (72)(35))

lispro	[B28-L-lysine, B29-L-proline]
lispro	[B28-L-lysine, B29-L-proline]
lispro	[B28-L-lisina, B29-L-prolina]

BAN
JAN
USAN

tregopilum
(insulinum tregopilum (103))

tregopil	$N^{6,\ B29}$-(4,7,10,13-tetraoxatetradecanoyl)
trégopil	$N^{6,\ B29}$-(4,7,10,13-tétraoxatétradécanoyl)
tregopil	$N^{6,\ B29}$-(4,7,10,13-tetraoxatetradecanoil)

ANNEX 5:

Names for substances with polyethylene glycol (PEG) polymeric chains

Names with *peg-* prefix

pegacaristimum (80)(42)
pegacaristim
pégacaristim
pegacaristim

pegademasum (63)(31)
pegademase
pégadémase
pegademasa

pegaldesleukinum (74)(36)
pegaldesleukin
pégaldesleukine
pegaldesleukina

pegamotecanum (91)(53)
pegamotecan
pégamotécan
pegamotecán

pegaspargasum (64)(31)
pegaspargase
pégaspargase
pegaspargasa

pegdinatanibum (103)
pegdinatanib
pegdinétanib
pegdinetanib

pegfilgrastimum (86)(47)
pegfilgrastim
pegfilgrastim
pegfilgrastim

peginesatidum (103)
peginesatide
péginésatide
peginesatida

peginterferonum alfa-2a (84)(46)
peginterferon alfa-2a
péginterféron alfa-2a
peginterferón alfa-2a

peginterferonum alfa-2b (84)(46)
peginterferon alfa-2b
péginterféron alfa-2b
peginterferón alfa-2b

pegloticasum (98)(60)
pegloticase
pégloticase
pegloticasa

pegmusirudinum (77)(39)
pegmusirudin
pegmusirudine
pegmusirudina

pegnartograstimum (80)(42)
pegnartograstim
pégnartograstim
pegnartograstim

pegorgoteinum (72)(35)
pegorgotein
pégorgotéine
pegorgoteína

pegoteratum (31)(14)
pegoterate
pégotérate
pegoterato

pegsiticasum (103)
pegsiticase
pegsiticase
pegsiticasa

pegsunerceptum (95)(49)
pegsunercept
pegsunercept
pegsunercept

pegvisomantum (88)(49)
pegvisomant
pegvisomant
pegvisomant

Names with *pegol* as second word

alacizumabum pegolum (98)(60)
alacizumab pegol
alacizumab pégol
alacizumab pegol

certolizumabum pegolum (97)(59)
certolizumab pegol
certolizumab pégol
certolizumab pegol

enlimomabum pegolum (77)(39)
enlimomab pegol
enlimomab pégol
enlimomab pegol

eptacogum alfa pegolum (activatum) (101)(63)
eptacog alfa pegol (activated)
eptacog alfa pégol (activé)
eptacog alfa pegol (activado)

nonacogum beta pegolum (103)
nonacog beta pegol
nonacog bêta pégol
nonacog beta pegol

somatropinum pegolum (103)
somatropin pegol
somatropine pégol
somatropina pegol

Explanatory note
INNs for substances which contain, as part of their structure, polyethylene glycol (PEG) polymeric chains are given either a *peg-* prefix or, when a two-word construction is used, include *pegol* as the second word. Both approaches are equivalent, the choice in the selection process depending on linguistic considerations. As there is a considerable variation in ways in which the PEG moiety is linked to the other part of the structure, and as there are considerable differences in the average molecular mass of the PEG moiety, structures of individual substances have not been reproduced in the document, but can be consulted in relevant INN lists which are accessible on-line at http://www.who.int/medicines/publications/druginformation/innlists/en/index.html
Furthermore, it should be noted that INN *macrogol* has been selected for polyethylene glycol as an individual polymeric substance. Each such macrogol name is followed by a number corresponding approximately to the average molecular mass of the product.

WHY INNs?

Since the number of drug substances being registered during the last decades is constantly increasing, there is a strong need to ensure the identification of each pharmaceutical compound by a unique, universally available and accepted name. The existence of an international nomenclature system for pharmaceutical products is crucial for the clear identification, safe prescription and dispensing of medicines to patients, and for communication and exchange of information among health professionals and scientists worldwide.

An **International Nonproprietary Name (INN)** identifies a pharmaceutical substance by a **unique name that is globally recognized and is public property**. A nonproprietary name is also known as a generic name. Generic names are intended to be used in pharmacopoeias, labeling, advertising, drug regulation and scientific literature.