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Ashgate Handbook of Anti-Infective Agents

Edited by
G.W.A. Milne

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Anti-infective Agents

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CONTENTS

Preface	vii
Acknowledgements	ix
How to Use This Book	xi
Glossary of Units	xv
Abbreviations and Symbols	xvii
PART I MAIN ENTRIES	1
Anthelmintics	3
Antiamebics	19
Antibiotics	29
2,4-Diaminopyrimidine	29
Aminoglycoside	31
Amphenicol	44
Ansamycin	46
beta-Lactam	47
Leprostatic	107
Lincosamide	109
Macrolide	111
Nitrofuran	119
Other	124
Polypeptide	134

Quinolone 143
Sulfonamide 152
Sulfone 168
Tetracycline 171
Tuberculostatic 179
Antibacterial Adjuncts 190
Antifungals 192
Antimalarials 221
Antipneumocystic Agents 231
Antiprotozoals 232
Antirickettsials 246
Antiseptics 249
Antisyphilitics 276
Antivirals 279

PART II INDEXES 299
CAS Registry Number Index 301
EINECS Number Index 319
Name and Synonym Index 329

PART III MANUFACTURERS AND SUPPLIERS DIRECTORY 437

PREFACE

The discovery, in the 1930s and 1940s, of antibiotics revolutionized the practice of medicine. Beginning with the streptomycins and the penicillins, hundreds of antibiotics have been developed and have come into routine use for the management of infectious diseases, opportunistic infections and infections resulting from trauma. This cornucopia of anti-infective agents has created a number of problems, not the least of which is the organization of information concerning them. This book, a compilation of all the anti-infective agents in current use, is an attempt to assemble, in one place, the relevant information for all these drugs.

The *Ashgate Handbook of Anti-infective Agents* contains chemical information and structures on drugs which are used to treat infection. Sixteen hundred anti-infective drugs are included, almost all of which are currently listed in the U.S. Pharmacopeia. All the anti-infective agents contained in *Drugs: Synonyms and Properties* (also published by Ashgate Publishing Limited) are listed in this book.

Antibiotics, in 16 classes, constitute the bulk of the *Handbook*, but also included are antivirals, anthelmintics, antiamebics, antifungals, antimalarials, antipneumocystic agents, antiprotozoals, antirickettsials, antiseptics, antisyphilitics and antibacterial adjuncts such as compounds which inhibit the normal metabolism of penicillins.

Most of the records describe pure chemicals and carry the appropriate Chemical Abstracts Service (CAS) Registry Number and the associated EINECS (European Inventory of Existing Commercial Chemical Substances) number. A chemical is thus

tagged with the major American and European identification numbers. In addition, all chemicals in this edition which also appear in the Twelfth Edition of the *Merck Index* have the *Merck Index* number provided. Details of the structure of a record are provided on pages xii and xiii.

Proprietary Considerations

Every attempt has been made to ensure the accuracy of the information provided in the *Ashgate Handbook of Anti-infective Agents*. However, the publishers cannot be held responsible for the accuracy of the information, and users are reminded that:

- The reporting of a name in this book cannot imply definitive legality in establishing proprietary usage. Questions concerning legal ownership of a particular name can be resolved by due legal process.

- A manufacturer in some countries may manufacture its product under names different from those cited here. Similarly, manufacture or marketing of a product may be licensed to a separate company in another country either under the same or a different name.

We trust that readers will find that this book contains a wealth of information which is difficult to obtain from any other source. It is the intention of the publishers to produce regularly updated editions and subsets of this compilation at suitable intervals in both printed and digital form. Companies wishing to submit new or updated material for inclusion in future editions should contact George W A Milne (address on page ix).

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HOW TO USE THIS BOOK

The *Ashgate Handbook of Anti-infective Agents* is divided into three parts. A brief description of each part is given below.

PART I

The main entries in this part are divided into 12 main categories:

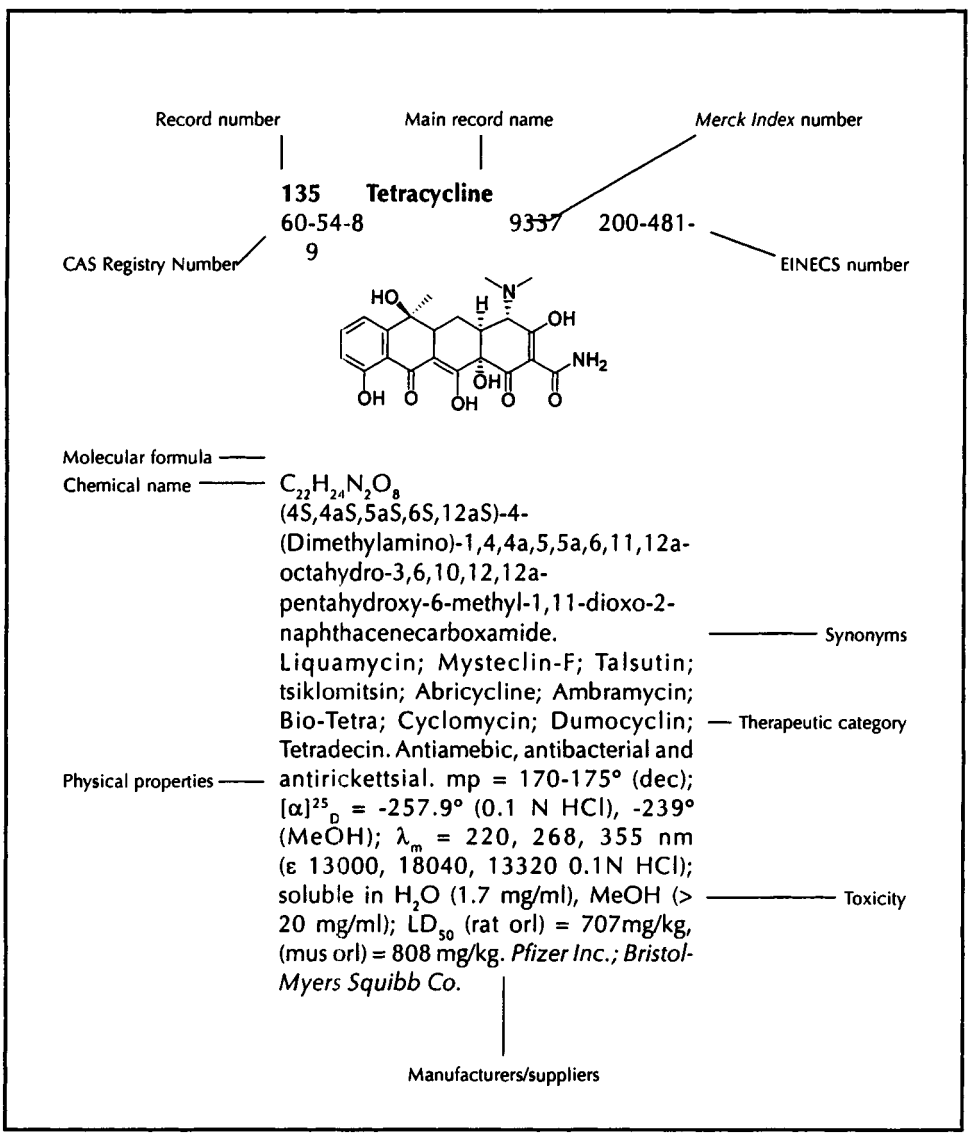
- Anthelmintics
- Antiamebics
- Antibiotics
- Antibacterial Adjuncts
- Antifungals
- Antimalarials
- Antipneumocystic agents
- Antiprotozoals
- Antirickettsials
- Antiseptics
- Antisyphilitics
- Antivirals.

The antibiotics are, in turn, subclassified according to chemical structural features, making a total of 27 sections. Each section lists chemical names in alphabetical order along with synonyms and other important data. Each record is identical in

structure enabling the reader to select specific information efficiently. A unique record number has been assigned to every record. The three indexes in Part II allow quick cross-referencing according to the record number in Part I by CAS Registry Number, EINECS number, or synonym.

Record Structure

A typical record in this book is shown below. The first line contains, in bold face, the record number for the record (135) and the name of the material (Tetracycline). The



second line gives the Chemical Abstracts Service (CAS) Registry Number for the compound (60-54-8), the corresponding *Merck Index* number (9337) and the European Inventory of Existing Commercial Chemical Substances (EINECS) number (200-481-9). These numbers always appear in the same position (left, center or right) enabling the reader to determine which source they belong to. Whenever CAS Registry Numbers are used in the text, they are always enclosed in brackets, for example [60-54-8]. The molecular formula and structure of the compound are provided and the chemical name of the compound begins on the next line. This is followed by as many as 100 synonyms, including proprietary names and other trivial names.

A description of the material and its known uses then follows and, when available, its physical properties are presented. These include melting point, boiling point, density or specific gravity, uv absorption, solubility and acute toxicity, usually limited to oral dosage in rodents. Finally, the companies who supply, or have supplied, the product are given.

PART II

This part contains three indexes. The purpose of each is described below:

- CAS Registry Number Index
  This index enables the reader to locate the record number and thereby find the main entry for an anti-infective agent based on its CAS Registry Number.

- EINECS Number Index
  This index enables the reader to locate the record number and thereby find the main entry for an anti-infective agent based on its EINECS number.

- Name and Synonym Index
  This is the master index containing all chemical and proprietary names found in Part I. It is the most convenient place for the reader to start if a name or synonym for a drug is known. This index enables the reader to locate the record number in Part I which relates to the main entry for that chemical.

PART III

This part contains a directory of chemical and pharmaceutical manufacturers and suppliers. Arranged alphabetically by company name, this directory provides information which will help the reader to contact the organization directly.

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GLOSSARY OF UNITS

Name	Description
Mass	Unless otherwise specified, mass is expressed in a multiple of grams (g), such as micrograms (μg; 10^{-6} g), milligrams (mg; 10^{-3} g), grams (g; 10^{0} g), kilograms (kg; 10^{+3} g), etc.
Volume	Volume is expressed in liters (l) or milliliters (ml) unless otherwise specified.
Temperature	When no units are cited, the temperature given is in degrees Celsius (°C).
Melting point	Melting points are cited in degrees Celsius (°C) unless otherwise specified.
Boiling point	When measured at atmospheric pressure, boiling points are cited with no pressure, e.g. bp = 167°. At other pressures, the pressure is also cited, i.e. $bp_{0.01}$ = 167°.
Density	The measurement temperature is given as a superscript; thus a density of 1.123 measured at 25° will appear as $d^{25} = 1.123$. If the measurement was explicitly referenced to the density of water at 4°, the citation will carry both a superscript and a

subscript, as in $d_4^{25} = 1.123$. Specific gravities are denoted by the abbreviation 'sg'.

Optical rotation

Denoted by the letter n, refractive indexes are usually determined at a temperature which is cited as a superscript, as in $n^{25} = 1.5432$. The wavelength of the light used in the measurement is cited as a subscript, as in $n_{546}^{25} = 1.5432$. Most commonly, the sodium D line (wavelength 549 nm) is used and in such cases, the subscript is a D, as in $n_D^{25} = 1.5432$.

Refractive index

As with refractive indexes, optical rotations (α) are cited with the measurement temperature superscripted, and the measurement wavelength (often the sodium D line) subscripted, as in $[\alpha]_D^{25} = 105°$. When mutarotation can occur, the rotation given is an equilibrium value, measured after some time interval, which is cited, as in $[\alpha]_D^{25} = 105°$(14 hr).

UV absorption

The ultraviolet absorption maxima given by the material are cited in nanometers (nm = 10^{-9} m) and the absorptivity (E, A, ε or log ε, all of which are unitless) may also be given.

Acute toxicity

Wherever possible the units of toxicity are LD_{50}, i.e. the dose which is lethal to 50% of the test animals. In most cases, acute toxicity is measured with the rat, orally administered, and the result is reported as LD_{50} (rat orl) = 50 mg/kg. Other species (for example, mus = mouse; rbt = rabbit; pgn = pigeon; gpg = guinea pig; m = male; f = female) are occasionally cited as are other administration routes (sc = subcutaneous; ihl = inhalation; ip = intraperitoneal; iv = intravenous). Chronic toxicity data are not given.

ABBREVIATIONS AND SYMBOLS

abs config	absolute configuration
abs	absolute
Ac –	acetyl (CH_3CO –)
ACE	angiotensin-converting enzyme
ACTH	adrenocorticotrophic hormone
AIDS	acquired immunodeficiency syndrome
alc	alcohol, alcoholic
amp.(s)	ampule(s)
AMP	adenosine 5′-monophosphate
aq	aqueous
atm	atmosphere, atmospheric
bp	boiling point
BPH	benign prostatic hypertrophy
Bu –	butyl (C_2H_5 –)
Bz –	benzoyl (C_6H_5CO –)
c	concentration (g/100 ml), in rotations
C	Celsius (temperature scale)
cAMP	cyclic AMP
CH_3CN	acetonitrile
C_5H_5N	pyridine
C_6H_6	benzene
C_7H_8	toluene
cc	cubic centimeters (millitres)

CCK	cholecystokinin
CCl_4	carbon tetrachloride
CCK	cholecystokinin
CH_2Cl_2	methylene chloride
$CHCl_3$	chloroform
cm	centimeter
CNS	central nervous system
CoA	coenzyme A
COMT	catechol-O-methyltransferase
d	dextro(rotatory)
d	density
dec	decompose, decomposition
dl-	racemic
DL-	racemic
DMA	dimethylacetamide
DMF	dimethylformamide
DMSO	dimethylsulfoxide
DNA	deoxyribonucleic acid
DOPA	dihydroxyphenylalanine
(E)-	(entgegen) opposite
e.g.	for example
ED	effective dose
EDTA	ethylenediamine tetraacetic acid
EINECS	European Inventory of Existing Commercial Chemical Substances
endo-	stereochemical descriptor
Et-	ethyl (C_2H_5 –)
Et_2O	diethyl ether
EtOAc	ethyl acetate
EtOH	ethanol
exo-	stereochemical descriptor
F	Fahrenheit (temperature scale)
g	gram(s)
g/l	grams/liter
gal	gallon(s)
GI	gastrointestinal
gpg	guinea pig
H_2O	water
H_2SO_4	sulfuric acid
HCl	hydrochloric acid
HIV	human immunodeficiency virus
HMG-CoA	3-hydroxy-3-methylglutaryl coenzyme A

hmtr	hamster
hr	hour
HT	hydroxytryptamine (serotonin)
ihl	inhalation
inj.	injection
im	intramuscular
ip	intraperitoneal
iPr –	isopropyl ($(CH_3)_2CH$ –)
IR	infrared
iv	intravenous
kcal	kilocalories
l	liter, levo(rotatory)
λ (lambda)	wavelength
LC	lethal concentration
LC_{50}	median lethal concentration
LD	lethal dose
LD_{50}	median lethal dose
log	common logarithm
MAO	monoamine oxidase
max	maximum, maxima
Me –	methyl (CH_3 –)
Me_2CO	acetone
MeOH	methanol
mg	milligram
min	minimum, minima, minute
MLD	minimum lethal dose
MAO	monoamine oxidase
mp	melting point
μg	microgram
mμ	millimicron (nanometer)
mus	mouse
N	normal, normality
nm	nanometer (10^{-9} m)
NMR	nuclear magnetic resonance
NSAID	non-steroidal anti-inflammatory drug
NSC	National Service Center (of the National Cancer Institute)
NTP	normal temperature, pressure
o-	ortho
OD	optical density
orl	oral
p-	para
pgn	pigeon

pH	acid-base scale (log of reciprocal hydrogen ion concentration)
pK	log of the reciprocal of the dissociation constant
pOH	acid-base scale (log of reciprocal hydroxyl ion concentration)
ppb	parts-per-billion
ppm	parts-per-million
Pr-	propyl (C_3H_7–)
(R)	rectus (stereochemical descriptor)
rbt	rabbit
RNA	ribonucleic acid
(S)	sinister (stereochemical descriptor)
S-	symmetical
sc	subcutaneous
sec	second
sec-	secondary
SG, sg	specific gravity
spp.	species (plural)
STP	standard temperature, pressure
tabl.	tablet
temp	temperature
tert-	tertiary
THF	tetrahydrofuran
U.K.	United Kingdom
USAN	United States Adopted Names
USP	United States Pharmacopeia
UV	ultraviolet
v/v	volume in volume
VIS	visible
viz.	namely
w/w	weight in weight
w/v	weight in volume
wt	weight
(Z)-	(zusammen) on the same side
>	greater than
>	less that
~	approximately
A	Angstrom units (10^{-8} cm)

PART I

MAIN ENTRIES

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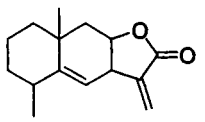
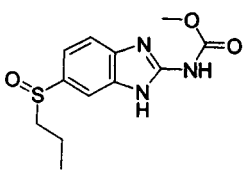
Anthelmintics

1 Alantolactone
546-43-0 208 208-899-3



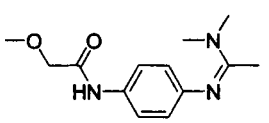
$C_{15}H_{20}O_2$
[3aR-(3aα,5β,8aβ,9aα)]-3a,5,6,7,8,8a,9,9a-Octahydro-5,8a-dimethyl-3-methylenenaphtho[2,3-b]-furan-2(3H)-one.
helenin; alant camphor; elecampane camphor; inula camphor; Eupatal. Anthelmintic. Targ nematodes. mp = 78-79°; bp = 275°; $[\alpha]_D$ = 175° ($CHCl_3$); λ_m = 212 nm (ε 9500 EtOH); freely soluble in EtOH, $CHCl_3$, C_6H_6, Et_2O, oils; insoluble in H_2O.

2 Albendazole Oxide
54029-12-8



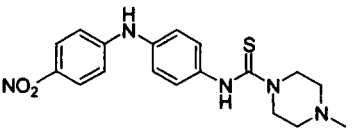
$C_{12}H_{15}N_3O_3S$
Methyl 5-(propylsulfinyl)-2-benzimidazolecarbamate.
Anthelmintic. *SmithKline Beecham Animal Health; SmithKline Beecham Pharmaceuticals.*

3 Amidantel
49745-00-8



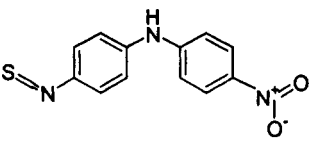
$C_{13}H_{19}N_3O_2$
4'-[[1-(Dimethylamino)ethylidene]-amino]-2-methoxyacetanilide.
Anthelmintic. Used against hookworms and ascarids in dogs.

4 Amocarzine
36590-19-9 608



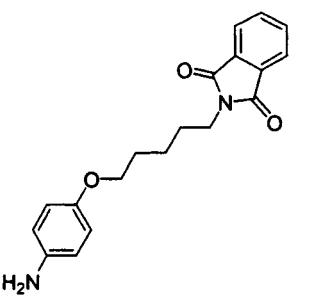
$C_{18}H_{21}N_5O_2S$
4-Methyl-4'-(p-nitroanilino)thio-1-piperazinecarboxanilide.
CGP-6140. Derivative of amoscanate. Anthelmintic. Targets nematodes. mp = 191-196°; soluble in CH_3CN. *Ciba-Geigy Corp.*

5 Amoscanate
26328-53-0 613



$C_{13}H_9N_3O_2S$
4-Isothiocyanato-N-(4-nitrophenyl)-benzeneamine.
nithiocyamine; C-9333-Go; CGP-4540. Anthelmintic. Targets schistosoma. mp = 196-198°.

6 Amphotalide
1673-06-9 626 216-809-9

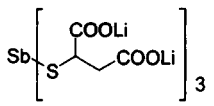


$C_{19}H_{20}N_2O_3$
2-[5-(4-Aminophenoxy)pentyl]-1H-isoindole-1,3(2H)-dione.

RP-6171; Schistomide. Anthelmintic. Targets schistosoma. mp = 113-114°. *May & Baker Ltd.*

7 Anthiolimine

305-97-5 720 206-173-0

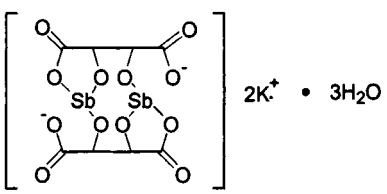


$C_{12}H_9Li_6O_{12}S_3Sb$

Mercaptobutanedioic acid antimony(3+) lithium salt (3:1:6). lithium antimony thiomalate; Anthiomaline. Trematodes. Very soluble in H_2O, slightly soluble in organic solvents. *Rhône-Poulenc.*

8 Antimony Potassium Tartrate

28300-74-5 741



$C_8H_4K_2O_{12}Sb_2.3H_2O$

Dipotassium bis[μ-[2,3-dihydroxybutanedioato(4-)-01,02:03,04]]diantimonate(2-) trihydrate steroisomer. tartar emetic; tartrated antimony; tartarized antimony; potassium antimonyl tartrate. Used as a mordant in the textiles and leather industries and as an anthelmintic. Targets schistosoma. d = 2.6; $[\alpha]_D^{20}$ = 140.69° (c = 2 H_2O), 139.25° (c = 2 in glycerol); soluble in H_2O (8.3 g/100 ml at 25°, 33.3 g/100 ml at 100°), glycerol (6.7 g/100 ml); insoluble in EtOH; LD_{50} (mus sc) = 55 mg/kg, (mus iv) = 65 mg/kg. *Stauffer Chemical Co.*

9 Antimony Sodium Tartrate

34521-09-0 743 252-070-9

$C_4H_4NaO_7Sb$

Antimony sodium oxide L-(+)-tartrate. sodium antimonyl tartrate; Emeto-Na; Stibunal. Anthelmintic. Targets schistosoma. Soluble in H_2O (66.6 g/100 ml); LD_{50} (mus iv) = 25 mg/kg.

10 Antimony Sodium Thioglycollate

539-54-8 744

$C_4H_4NaO_4S_2Sb$

[(5-Oxo-1,3,2-oxathiostibolan-2-yl)thio]acetic acid sodium salt. antimony sodium thioacetate. Anthelmintic. Targets schistosoma. Freely soluble in H_2O, unstable in alkali.

11 Antimony Thioglycollamide

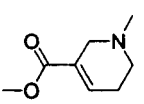
6533-78-4 746

$C_6H_{12}N_3O_3S_3Sb$

Thioantimonic acid tris(2-amino-2-oxoethyl) ester. mercaptoacetamide antimony derivative; antimony thioglycollic acid triamide. Anthelmintic. Targets schistosoma. mp = 140°; soluble in H_2O (0.5 g/100 ml), insoluble in Et_2O.

12 Arecoline

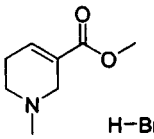
63-75-2 815 200-565-5



$C_8H_{13}NO_2$

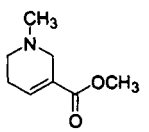
1,2,5,6-Tetrahydro-1-methyl-3-pyridinecarboxylic acid methyl ester. N-methyltetrahydronicotinate; arecaline; arecholine; methylarecaidin. Cholinergic alkaloid from the seeds of the betel nut palm. Anthelmintic. Targets Cestodes. bp = 209°, bp_7 = 92-93°, bp_{12} = 105°; d^{20} = 1.0495; miscible with H_2O, EtOH, Et_2O; soluble in $CHCl_3$; LD_{50} (mus sc) = 100 mg/kg, (dog sc) = 5 mg/kg. *Nopco.*

13 Arecoline Hydrobromide
300-08-3 815 206-087-3



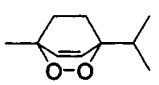
$C_8H_{14}BrNO_2$
1,2,5,6-Tetrahydro-1-methyl-3-pyridinecarboxylic acid methyl ester hydrobromide.
Derivative of the cholinergic alkaloid from the seeds of the betel nut palm. Anthelmintic. Targets Cestodes. mp = 169-171°; soluble in H_2O (100 g/100 ml), EtOH (10 g/100 ml at 25°, 50 g/100 ml at 76°); slightly soluble in $CHCl_3$, Et_2O. *Nopco.*

14 Arecoline p-Stibonobenzoic Acid
17162-36-6 815



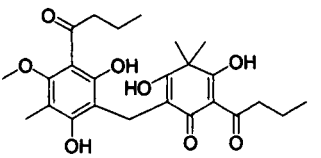
$C_{15}H_{20}NO_7Sb$
1,2,5,6-Tetrahydro-1-methyl-3-pyridinecarboxylic acid methyl ester compound with stibonobenzoic acid.
arecoline p-stibonobenzoic acid; Anthelin. Derivative of the cholinergic alkaloid from the seeds of the betel nut palm. Anthelmintic. Targets Cestodes. *Nopco.*

15 Ascaridole
512-85-6 864 208-147-4



$C_{10}H_{16}O_2$
1-Methyl-4-(1-methylethyl)-2,3-dioxabicyclo[2.2.2]oct-5-ene.
1,4-peroxido-p-menthene-2; Ascarisin. Anthelmintic. Targets nematodes. d_4^{20} = 1.0103, d_{20}^{20} = 1.0113; mp = 3.3°; $bp_{0.2}$ = 39-40°; $[\alpha]_D^{20}$ = ±0.0°; soluble in C_6H_{14}, C_5H_{12}, EtOH, C_7H_8, C_6H_6, castor oil.

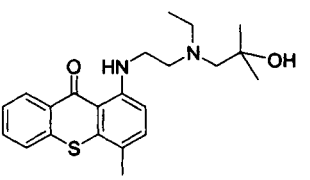
16 Aspidin
584-28-1 881



$C_{25}H_{32}O_8$
2-[[2,6-Dihydroxy-4-methoxy-3-methyl-5-(1-oxobutyl)phenyl]methyl]-3,5-dihydroxy-4,4-dimethyl-6-(1-oxobutyl)-2,5-cyclohexadien-1-one.
polystichin. Active principle of fern root. Anthelmintic. Targets Cestodes. mp = 124-125°; λ_m = 230, 290 nm (ε 25500, 21300, cyclohexane); soluble in Et_2O, C_6H_6, $CHCl_3$; sparingly soluble in MeOH, EtOH, Me_2CO.

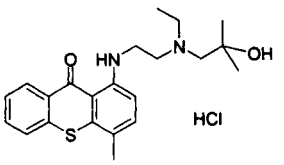
17 Aspidinol
519-40-4 882
$C_{12}H_{16}O_4$
1-(2,6-Dihydroxy-4-methoxy-3-methylphenyl)-1-butanone.
Found in extracts of male fern. Anthelmintic. Targets Cestodes. mp = 156-161°; soluble in EtOH, Et_2O, $CHCl_3$; sparingly soluble in H_2O, C_6H_6.

18 Becanthone
15351-04-9 1044



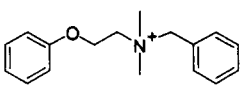
$C_{22}H_{28}N_2O_2S$
1-[[2-[Ethyl(2-hydroxy-2-methylpropyl)amino]ethyl]amino]-4-methyl-9H-thioxanthen-9-one.
becantone. Anthelmintic. Targets schistosoma. *Sterling Winthrop, Inc.*

19 Becanthone Hydrochloride
5591-22-0 1044



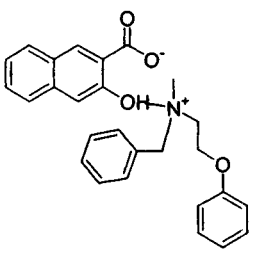
$C_{22}H_{29}ClN_2O_2S$
1-[[2-[Ethyl(2-hydroxy-2-methylpropyl)amino]ethyl]amino]-4-methyl-9H-thioxanthen-9-one hydrochloride.
Win-13820; Loranil. Anthelmintic. Targets schistosoma. mp = 157.6-160.4°. *Sterling Winthrop, Inc.*

20 Bephenium
7181-73-9 1187 230-546-7



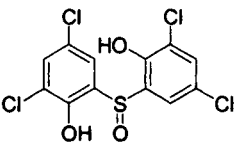
$C_{17}H_{22}NO^+$
Benzylmethyl(2-phenoxyethyl)amine.
Anthelmintic. Targets nematodes. [chloride]: mp = 135-136°; [bromide]: mp = 144.5-146°; [iodide]: mp = 146-147°; [Pamoate (biphenium embonate; Frantin)]: mp = 144-146°. *Glaxo Wellcome Inc.*

21 Bephenium Hydroxynaphthoate
3818-50-6 1187 223-306-8



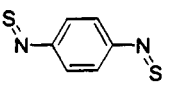
$C_{28}H_{29}NO_4$
Benzyldimethyl(2-phenoxyethyl)ammonium 3-hydroxy-2-naphthoate.
Alcopar; Alcopara; Befeniol; Lecibis; Nemex. Anthelmintic. Targets nematodes. mp = 170-171°. *Glaxo Wellcome Inc.*

22 Bithionoloxide
844-26-8



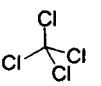
$C_{12}H_6Cl_4O_3S$
6,6'-Sulfinylbis(2,4-dichlorophenol).
Used in veterinary medicine as an anthelmintic targeting trematodes.

23 Bitoscanate
4044-65-9 1345 223-741-3



$C_8H_4N_2S_2$
1,4-Diisothiocyanatobenzene.
Jonit. Anthelmintic. Targets nematodes. mp = 132°. *Hoechst.*

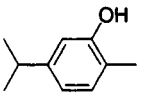
24 Carbon Tetrachloride
56-23-5 1864 200-262-8



CCl_4
Tetrachloromethane.
tetrachloromethane; perchloromethane; Necatorina; Benzinoform. Anthelmintic. Targets nematodes. d_{25}^{25} = 1.589; mp = -23°; bp = 76.7°; soluble in H_2O (50 mg/100 ml); miscible with EtOH, $CHCl_3$, C_6H_6, Et_2O, CS_2, petroleum ether, oils; LC_{50} (mus ihl) = 9528 ppm; LD_{55} (rat orl) = 2920 mg/kg, (mus orl) = 12100-14400 mg/kg, (dog orl) = 2300 mg/kg, (mus ip) = 4100 mg/kg, (mus sc) =30400 mg/kg.

25 Carvacrol

499-75-2 1923 207-889-6



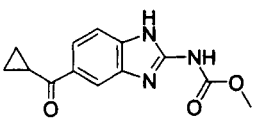
$C_{10}H_{14}O$

2-Methyl-5-(1-methylethyl)phenol.

2-hydroxy-p-cymene; isopropyl o-cresol; isothymol. Used as a general disinfectant. Anthelmintic. Targets nematodes. d_4^{20} = 0.976, d_{25}^{25} = 0.9751; bp = 237-238°, bp_{18} = 118-122°, bp_3 = 93°; mp ≅ 0°; λ_m = 277.5 nm (log ε = 3.262 EtOH); insoluble in H_2O; soluble in EtOH, Et_2O; LD_{50} (rbt orl) = 100 mg/kg.

26 Cyclobendazole

31431-43-3 2781 250-637-5



$C_{13}H_{13}N_3O_3$

Methyl 5-(cyclopropylcarbonyl)-2-benzimidazolecarbamate.

R-17147; CC-2481; Haptocil. Anthelmintic. Targets nematodes. mp = 250.5°. *Janssen Pharmaceutical, Ltd.*

27 Diammonium Embelate

3595

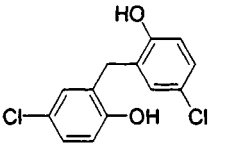
$C_{17}H_{34}N_2O_4$

2,5-Dihydroxy-3-undecyl-2,5-cyclohexadiene-1,4-dione diammonium salt.

Ammonium embelate; embelin diammonium salt. Anthelmintic (cestodes). Mucous membrane irritant. Derivative of embelin, from the fruit of *embelia ribes* Burm., *Myrsinacea*. Soluble in H_2O, dilute alcohol. *See* Embelin.

28 Dichlorophen

97-23-4 3120 202-567-1



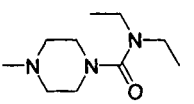
$C_{13}H_{10}Cl_2O_2$

2,2'-Methylenebis(4-chlorophenol).

dichlorophene; G-4. Anthelmintic. Targets Cestodes.

29 Diethylcarbamazine

90-89-1 3165 202-023-3



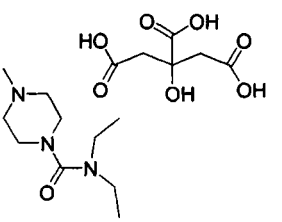
$C_{10}H_{21}N_3O$

N,N-Diethyl-4-methyl-1-piperazinecarboxamide.

carbamazine; 84L; RP-3799; Carbilazine; Caricide; Cypip; Ethodryl; Notézine; Spatonin; [phosphate]: Ditrazin. Anthelmintic. Targets nematodes. mp = 47-49°; bp_3 = 108.5-111°; [hydrochloride]: mp = 156.5-157°.

30 Diethylcarbamazine Citrate

1642-54-2 3165 216-696-6



$C_{16}H_{29}N_3O_8$

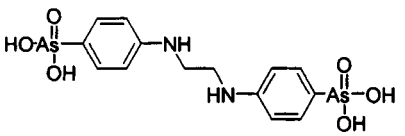
N,N-Diethyl-4-methyl-1-piperazinecarboxamide citrate.

Banocide; Dec; Dirocide; Filaribits; Filazine; Franocide; Hetrazan; Loxuran; Longicid. Anthelmintic. Targets nematodes. mp = 141-143°; soluble in H_2O (> 75 g/100 ml);

soluble in EtOH; insoluble in C_6H_6, Me_2CO, Et_2O, $CHCl_3$; LD_{50} (rat orl) = 1.38 g/kg.

31 Difetarsone

3639-19-8



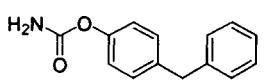
$C_{14}H_{18}As_2N_2O_6$

N,N-Ethylenediarsanilic acid.

Bemarsal Anthelmintic, used for the treatment of Trichuris trichiura (whipworm) infestation.

32 Diphenane

101-71-3 3365



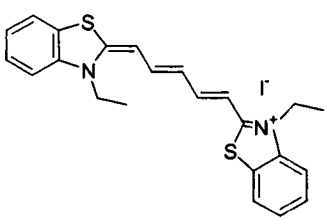
$C_{14}H_{13}NO_2$

α-Phenyl-p-cresolcarbamate.

Anthelmintic. Targets nematodes. mp = 147-150°; insoluble in H_2O; soluble EtOH, MeOH, $CHCl_3$, Et_2O, C_6H_6.

33 Dithiazanine Iodide

514-73-8 3434 208-186-7



$C_{23}H_{23}IN_2S_2$

3-Ethyl-2-[5-(3-ethyl-2-benzothiazolinylidene)-1,3-pentadienyl]benzothiazolium iodide.

Developed as a photographic sensitizer. Anthelmintic. Targets nematodes. mp = 248° (dec); insoluble in H_2O.

34 Doramectin

117704-25-3 3483

$C_{50}H_{74}O_{14}$

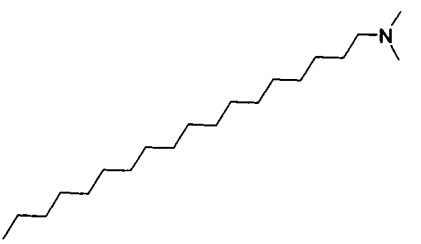
(2aE,4E,8E)-(5'S,6S,6'R,7S,11R,13S,15S,17aR,20R,20aR,20bS)-6'-Cyclohexyl-5',6,6',7,10,11,14,15,17a,20,20a,20b-dodecahydro-20,20b-dihydroxy-5',6,8,19-tetramethyl-17-oxospiro[11,15-methano-2H,13H,17H-furo[4,3,2-pq]-[2,6]-benzodioxacyclooctadecin-13,2'-[2H]pyran]-7-yl 2,6-dideoxy-4-O-(2,6-dideoxy3-O-methyl-α-L-arabinohexopyranosyl)-3-O-α-L-arabinohexapyranoside.

25-cyclohexyl-5-O-demethyl-25-de(1-methylpropyl)avermectin A_{1a}.

Endectocide, used to treat Sheep scabies. mp= 116-119°. *Pfizer International.*

35 Dymanthine

124-28-7 3525 204-694-8



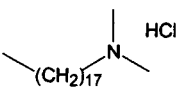
$C_{20}H_{43}N$

N,N-Dimethyloctadecylamine.

N,N-dimethylstearylamine; N,N-dimethyloctadecylamine; Armeen DM 18D; N,N-dimethyl-1-octadecanamine; 18. Anthelmintic. Targets nematodes. mp = 23°. *Pfizer Inc.*

36 Dymanthine Hydrochloride

1613-17-8 3525 216-559-0



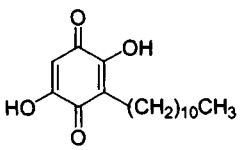
$C_{20}H_{44}ClN$

N,N-Dimethyloctadecylamine hydrochloride.

GS-1339; NSC-5547; Dimantine; N-n-octadecyl-N,N-dimethyl amine; Thelmesan. Anthelmintic. Targets nematodes. *Pfizer Inc.*

37 Embelin

550-24-3 3595 208-979-8



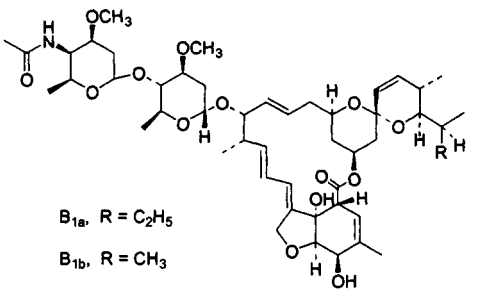
$C_{17}H_{26}O_4$

2,5-Dihydroxy-3-undecyl-2,5-cyclohexadiene-1,4-dione.

embelic acid. Anthelmintic. Targets Cestodes. From the fruit of *embelia ribes* Burm., *Myrsinacea*.

38 Eprinomectin

133305-89-2 3667

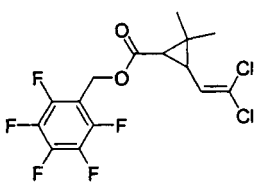


Mixture of eprinomectin B_{1a} (90%) and eprinomectin B_{1b} (10%).

Anthelmintic targeting nematodes.

39 Fenfluthrin

75867-00-4



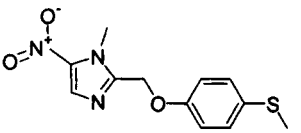
$C_{15}H_{11}Cl_2F_5O_2$

2,3,4,5,6-Pentafluorobenzyl (1R,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate.

Synthetic pyrethroid used as an insecticide and anthelmintic.

40 Fexinidazole

59729-37-2



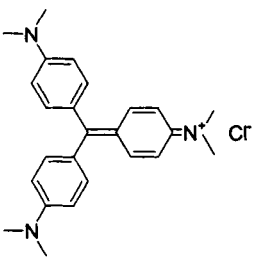
$C_{12}H_{13}N_3O_3S$

1-Methyl-2-[[p-(methylthio)phenoxy]-methyl]-5-nitroimidazole.

Anthelmintic.

41 Gentian Violet

548-62-9 4401 208-953-6

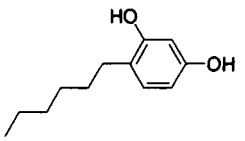


$C_{25}H_{30}ClN_3$

[4-[Bis[4-(dimethylamino)phenyl]-methylene]-2,5-cyclohexadien-1-ylidene]dimethylammonium chloride.

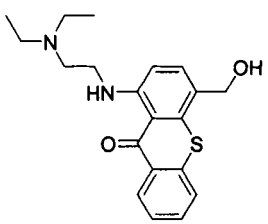
C.I. Basic Violet 3; hexamethylpararosaniline chloride; aniline violet; crystal violet; methylrosaniline chloride; C.I. 42555; Adergon; Axuris; Badil; Gentiaverm; Meroxylan; Meroxyl; Pyoktanin; Vianin; Viocid. Anthelmintic. Targets nematodes. Insoluble in Et_2O; soluble in H_2O, $CHCl_3$, EtOH (10 g/100 ml), glycerin (6.7 g/100 ml); LD_{50} (mus orl) = 1200 mg/kg, (rat orl) = 1000 mg/kg.

42 4-Hexylresorcinol
136-77-6 4750 205-257-4



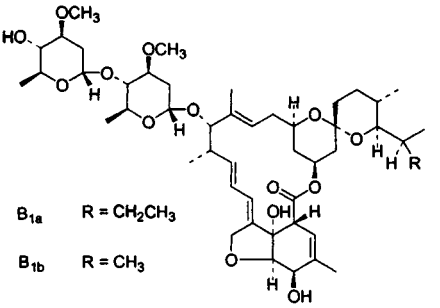
$C_{12}H_{18}O_2$
4-Hexyl-1,3-benzene diol.
ST-37; Ascaryl; Caprokol; Crystoids; Gelovermin; Sucrets; Worm-Agen. Used as a topical antiseptic and Anthelmintic. Targets nematodes. Pale yellow liquid that becomes solid at room temperature; mp = 67.5-69°; bp = 333-335°, bp_{6-7} = 1768-180°, bp_{13-14} = 198-200°; soluble in H_2O (50 mg/100 ml), Et_2O, $CHGCl_3$, Me_2CO, EtOH; LD_{50} (rat orl) = 550 mg/kg. *Merck & Co., Inc.*

43 Hycanthone
3105-97-3 4795 221-463-7



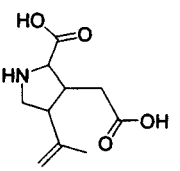
$C_{20}H_{24}N_2O_2S$
1-[[2-(Diethylamino)ethyl]amino]-4-(hydroxymethyl)-9H-thioxanthen-9-one.
Etrenol [as mesylate]. Metabolite of lucanthone. Anthelmintic. Targets schistosoma. mp = 100.6-102.8°; λ_m = 233, 258, 329, 438 nm (ε 19400, 37000, 9700, 6600 EtOH); sensitive to acid; [hydrochloride]: mp = 173-176° (dec). *Sterling Health U.S.A.*

44 Ivermectin
70288-86-7 5264 274-536-0



$C_{48}H_{74}O_{14}$
(2aE,4E,8E)-(5'S,6S,6'R,7S,11R,13R,15S,17aR,20R,20aR,20bS)-6'-(S)-sec-Butyl-3',4',5',6,6',7,10,11,14,15,17a,20,20a,20b)-tetradecahydro-20,20b-dihydroxy-5',6,8,19-tetramethyl-17-oxospiro[11,15-methano-2H,13H,17H]furo-[4,3,2-pq][2,6]benzodioxacyclooctadecin-13,2'-[2H]pyran]-7-yl 2,6-dide-oxy-4-O-(2,6-dideoxy-3-O-methyl-α-L-arabino-hexopyranosyl)-3-O-methyl-α-L-arabino-hexopyranoside.
22,23-dihydro C-076B; MK-933; Cardomec; Cardotek 30; Eqvalan; Heartgard 30; Ivomec; Mectizan; Zimecterin. Mixture of avermectins, primarily avermectin 22,23-dihydro-avermectin B_{1a}. Anthelmintic. Targets onchocerca (filarial worms). $[\alpha]_D$ = 71.5° ± 3°; λ_m = 238, 245 nm (ε 27100, 30100 MeOH); slightly soluble in H_2O (0.4 mg/100 ml); insoluble in hydrocarbons; very soluble in MEK, prolylene glycol, polyethylene glycol.

45 Kainic Acid
487-79-6 5289

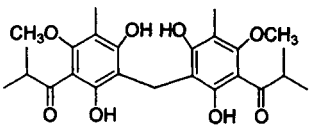


$C_{10}H_{15}NO_4$
[2S-(2α,3β,4β)]-2-Carboxy-4-(1-methylethenyl)-3-pyrrolidene-acetic acid.
digenic acid; α-kainic acid; L-xylo-

kainic acid; Digenin; Helminal. Anthelmintic. Targets nematodes. mp = 251° (dec); $[\alpha]_D^{24}$ = -14.8° (c = 1.01); soluble in H_2O, insoluble in Et_2O.

46 α-Kosin

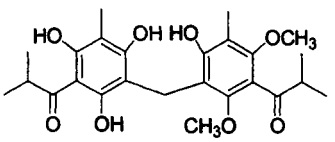
5333



$C_{25}H_{32}O_8$
5,5'-Methylenebis[4,6-dihydroxy-2-methoxy-3-methylisobutyrophenone].
From flowers of Hagenia abyssinica J. J. Gmel. Co-occurs with β-kosin. Anthelmintic. Targets Cestodes. mp= 160-160.5°; λ_m = 227, 290 nm (ε 30800, 24400); soluble in EtOH, C_6H_6, $CHCl_3$, Et_2P, AcOH; [tetraacetate]: mp = 124°.

47 β-Kosin

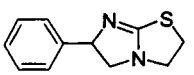
5333



$C_{25}H_{32}O_8$
5,5'-Methylenebis[2,4,6-trihydroxy-3-methylisobutyrophenone] 4'-methyl ether.
From flowers of Hagenia abyssinica J. J. Gmel. Co-occurs with α-kosin. Anthelmintic. Targets Cestodes. mp = 120°; λ_m = 228, 292 nm (ε 30300, 21260).

48 Levamisole

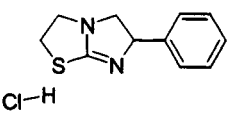
14769-73-4 5486 238-836-5



$C_{11}H_{12}N_2S$
(-)-2,3,5,6-Tetrahydro-6-phenylimidazol[2,1-b]thiazole.
Levovermax; Totalon. Anthelmintic. Targets nematodes. mp = 60-61.5°; $[\alpha]_D^{25}$ = -85.1 (c = 10 $CHCl_3$); [dl form (teramisole, tetramizole)]: mp = 87-89°. *Janssen Pharmaceutical, Ltd.*

49 Levamisole Hydrochloride

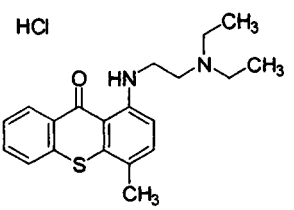
16595-80-5 5486 240-654-6



$C_{11}H_{13}Cl2N_2S$
(-)-2,3,5,6-Tetrahydro-6-phenylimidazol[2,1-b]thiazole hydrochloride.
Ergamisol; R-12564; Ascaridil; Decaris; Ergamisol; Levacide; Levadin; Levasole; Meglum; Nemicide; Nilverm; Ripercol; Solaskil; Spartakon; Tramisol. Anthelmintic. Targets nematodes. mp = 227-229°; $[\alpha]_D^{20}$ = -124° ± 2° (c = 0.9 H_2O); soluble in H_2O; [dl form (Bayer 9051; McN-JR-8299; R-8299)]: mp = 264-265°; soluble in H_2O (21 g/100 ml), MeOH, propylene glycol; sparingly soluble in EtOH, $CHCl_3$, C_6H_{14}, Me_2CO; LD_{50} (mus iv) = 22 mg/kg, (mus sc) = 84 mg/kg, (mus orl) = 210 mg/kg, (rat iv) = 24 mg/kg, (rat sc) = 130 mg/kg, (rat orl) = 480 mg/kg. *Janssen Pharmaceutical, Ltd.*

50 Lucanthone Hydrochloride

548-57-2 5620 208-951-5

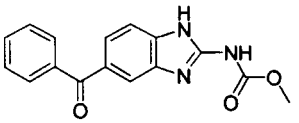


$C_{20}H_{25}ClN_2OS$
1-[[2-(Diethylamino)ethyl]amino]-4-methyl-9H-thioxanthen-9-one hydrochloride.
MS-752; RP-3735; Miracil D; Nilodin; Miracol; Tixantone. Anthelmintic. Targets schistosoma. mp = 195-196°;

soluble in H_2O, slightly soluble in EtOH; [lucanthone]: mp = 64-65°, soluble in most organic solvents.

51 Mebendazole

31431-39-7 5807 250-635-4



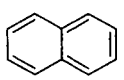
$C_{16}H_{13}N_3O_3$

Methyl 5-benzoyl-2-benzimidazolecarbamate.

Vermox; R-17635; Bantenol; Equivurm Plus; Lomper; Mebenvet; Noverme; Ovitelmin; Pantelmin; Telmin; Vermicidin; Vermirax. Anthelmintic. Targets nematodes. mp = 288.5°; insoluble in H_2O, EtOH, Et_2O, $CHCl_3$; soluble in formic acid; LD_{50} (sheep orl) > 80 mg/kg, (mus, rat, chk) > 40 mg/kg. *Janssen Pharmaceutical, Ltd.*

52 Naphthalene

91-20-3 6457 202-049-5



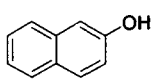
$C_{10}H_8$

Naphthalene.

naphthalin; naphthene; tar camphor. Anthelmintic. Targets Cestodes. mp = 80.2°; bp = 217.9°; d_4^{20} = 1.162; d_4^{100} = 0.9628; insoluble in H_2O; soluble in EtOH or MeOH (7.7 g/100 ml), C_6H_6 or C_7H_8 (28.6 g/100 ml), $CHCl_3$ or CCl_4 (50 g/100 ml), CS_2 (83.3 g/100 ml).

53 2-Naphthol

135-19-3 6471 205-182-7



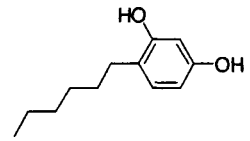
$C_{10}H_8O$

2-Naphthalenol.

beta-naphthol; β-naphthol; β-hydroxynaphthalene; isonaphthol; C.I. Azoic Coupling Component 1; C.I. Developer 5; C.I. 37500. Formerly used as an anthelmintic. Targets nematodes. mp = 121-123°; bp = 285-286°; d = 1.22; λ_m = 226, 265, 275, 286, 320, 331 (ε 91194, 3911, 4559, 3301, 1861, 2163 EtOH); soluble in H_2O (0.1 g/100 ml at 35°, 1.25 g/100 ml at 100°), EtOH125 g/100 ml), $CHCl_3$ (5.9 g/100 ml), Et_2O (76.9 g/100 ml), glycerol, olive oil.

54 4-Hexylresorcinol

136-77-6 4750 205-257-4



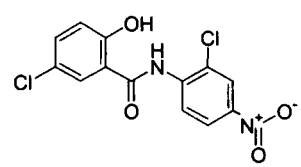
$C_{12}H_{18}O_2$

4-Hexyl-1,3-benzene diol.

ST-37; Ascaryl; Caprokol; Crystoids; Gelovermin; Sucrets; Worm-Agen. Used as a topical antiseptic. Anthelmintic. Targets nematodes. mp = 67.5-69°; bp = 333-335°, bp_{6-7} = 1768-180°, bp_{13-14} = 198-200°; soluble in H_2O (50 mg/100 ml), Et_2O, $CHCCl_3$, Me_2CO, EtOH; LD_{50} (rat orl) = 550 mg/kg. *Merck & Co., Inc.*

55 Niclosamide

50-65-7 6602 200-056-8

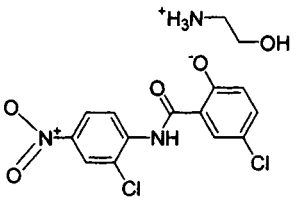


$C_{13}H_8Cl_2N_2O_4$

2',5-Dichloro-4'-nitrosalicyanilide.

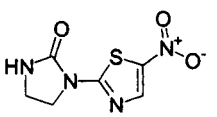
Niclocide; Yomesan; BAY-2353; Cestocide; Niclocide; Ruby; Trédémine. Bayer; Farbenfabriken Bayer A.G. Anthelmintic. Targets Cestodes. mp = 225-230°; insoluble in H_2O; sparingly soluble in EtOH, $CHCl_3$, Et_2O.

56 Niclosamide Ethanolamine Salt
1420-04-8 6602 215-811-7



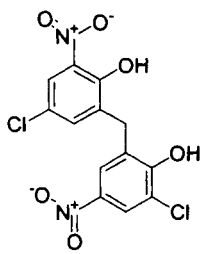
$C_{15}H_{15}Cl_2N_3O_5$
2',5-Dichloro-4'-nitrosalicyanilide ethanolamine salt.
clonitrilide; Bayluscid. Bayer; Farbenfabriken Bayer A.G. Anthelmintic. Targets Cestodes. mp = 204°.

57 Niridazole
61-57-4 6656 200-512-6



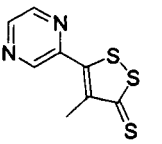
$C_6H_6N_4O_3S$
1-(5-Nitro-2-thiazolyl)-2-imidazolidinone.
nitrothiamidazol; Ba-32644; Ciba 32644-Ba; Ambilhar. Anthelmintic. Targets schistosoma. mp = 260-262°. *Ciba plc.*

58 Nitroclofene
39224-48-1



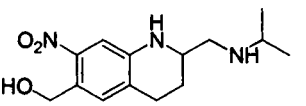
$C_{13}H_8Cl_2N_2O_6$
4,6'-Dichloro-4',6-dinitro-2,2'-methylenediphenol.
Anthelmintic.

59 Oltipraz
64224-21-1 264-736-6



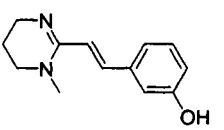
$C_8H_6N_2S_3$
4-Methyl-5-(pyrazinyl)-3H-1,2-dithiole-3-thione.
RP-35972. An antischistosomal drug with chemoprotective properties. Anticarcinogen.

60 Oxamniquine
21738-42-1 7051 244-556-4



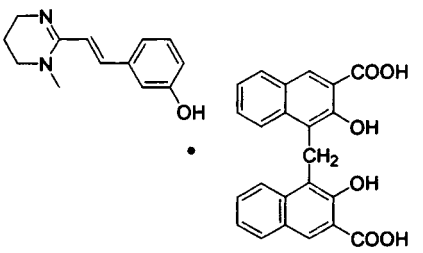
$C_{14}H_{21}N_3O_3$
1,2,3,4-Tetrahydro-2-[[(1-methylethyl)-amino]methyl]-7-nitro-6-quinoline-methanol.
UK-4271; Mansil; Vansil. Anthelmintic. Targets schistosoma. mp = 147-149°; soluble in Me_2CO, $CHCl_3$, MeOH, H_2O (0.03 g/100 ml); λ_m = 205.5, 249.5, 389.5 ($A^{1\%}_{1\ cm}$ 486, 695, 62.5 MeOH); LD_{50} (mus im) > 2000 mg/kg, (mus orl) = 1300 mg/kg, (rbt im) > 1000 mg/kg, (rbt orl) = 800 mg/kg. *Pfizer Inc.*

61 Oxantel
36531-26-7 7055



$C_{13}H_{16}N_2O$
(E)-m-[2-(1,4,5,6-Tetrahydro-1-methyl-2-pyrimidinyl)vinyl]phenol.
CP-14445. Anthelmintic. Targets nematodes. [hydrochloride]: mp = 207-208°; λ_m = 231, 274 nm (ε 12700, 20100, H_2O). *Pfizer Inc.*

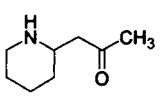
62 Oxantel Pamoate
68813-55-8 7055 272-332-6



$C_{36}H_{32}N_2O_7$
(E)-m-[2-(1,4,5,6-Tetrahydro-1-methyl-2-pyrimidinyl)vinyl]phenol 4,4'-methylenebis[3-hydroxy-2-naphthoate] (1:1) (salt).
Telopar; CP-14445-16; oxantel ebonate. Anthelmintic. Targets nematodes. *Pfizer Inc.*

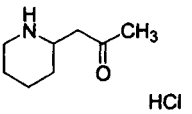
63 Papain
9001-73-4 7148 232-627-2
Caroid; Papayotin; vegetable pepsin; Arbuz; Nematolyt; Summetrin; Tromasin; Velardon; Vermizym; component of: Panafil. Proteolytic enzyme. Anthelmintic. Targets nematodes. λ_m = 278 nm ($A^{1\%}_{1\ cm}$ 25.0); insoluble in most organic solvents. *Sterling Winthrop, Inc.; Rystan Co., Inc.*

64 Pelletierine
4396-01-4 7200 224-523-0



$C_8H_{15}NO$
1-(2-Piperidinyl)-2-propanone.
2-acetonylpiperidine; punicine; isopelletierine, (±)-pelletierine. Anthelmintic. Targets Cestodes. bp = 195°; bp_{11} = 102-107°; d_4^{20} = 0.988; soluble in H_2O (5 g/100 ml), EtOH, Et_2O, $CHCl_3$.

65 Pelletierine Hydrochloride
5984-61-2 7200

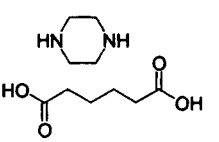


$C_8H_{16}ClNO$
1-(2-Piperidinyl)-2-propanone hydrochloride.
Anthelmintic. Targets Cestodes. mp = 145°; soluble in H_2O, EtOH.

66 Piperazine
110-85-0 7617 203-808-3

$C_4H_{10}N_2$
Piperazine.
hexahydropyrazine; piperazidine; diethylenediamine. Anthelmintic. Targets nematodes. mp = 106°; bp = 146°; freely soluble in H_2O, glycerol, glycols, EtOH (50 g/100 ml); insoluble in Et_2O. *Union Carbide Corp.*

67 Piperazine Adipate
142-88-1 7617 205-569-0

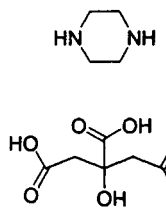


$C_{10}H_{20}N_2O_4$
Piperazine compound with hexanedioic acid (1:1).
Entacyl; Oxyzin; Vermicompren; Nometan; Oxypaat; Pipadox; Oxurasin. Anthelmintic. Targets nematodes. mp = 256-257°; soluble in H_2O (5.53 g/100 ml at 20°, 6.61 g/100 ml at 30°, 10.14 g/100 ml at 56.3°), MeOH (0.02

g/100 ml at 25°); insoluble in EtOH, iPrOH, dioxane; LD_{50} (mus orl) = 115400 g/kg, (rat orl) = 7900 mg/kg. *BDH Laboratory Supplies.*

68 Piperazine Citrate

144-29-6 7617 205-622-8



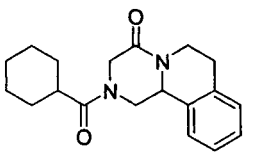
$C_{24}H_{46}N_6O_{14}$

Tripiperazine dicitrate.

Helmezine; Oxucide; Patazine; Pinozan; Pipizan Citrate; Pipracid (syrup); Rhomex; Ta-Verm; Worm Away. Anthelmintic. Targets nematodes. mp = 182-187° (dec); insoluble in EtOH, Et_2O, $CHCl_3$. *Sterling Winthrop, Inc.*

69 Praziquantel

55268-74-1 7896 259-559-6



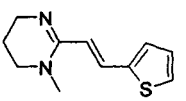
$C_{19}H_{24}N_2O_2$

2-(Cyclohexylcarbonyl)-1,2,3,6,7,11b-hexahydro-4H-pyrazino[2,1-a]-isoquinolin-4-one.

EMBAY 8440; Biltricide; Cesol; Droncit. Anthelmintic. Targets schistosoma. mp = 136-138°; soluble in H_2O (0.04 g/100 ml), EtOH (9.7 g/100 ml), $CHCl_3$ (56.7 g/100 ml); LD_{50} (mus orl) = 2000-3000 mg/kg, (mus sc) > 3000 mg/kg, (rat orl) = 2000-3000 mg/kg, (rat sc) > 3000 mg/kg. *E. Merck.*

70 Pyrantel

15686-83-6 8139 239-774-1



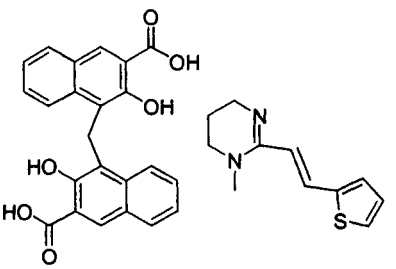
$C_{11}H_{14}N_2S$

(E)-1,4,5,6-Tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine.

Anthelmintic. Targets nematodes. mp = 178-179°. *Pfizer Inc.*

71 Pyrantel Pamoate

22204-24-6 8139 244-837-1



$C_{34}H_{30}N_2O_6S$

(E)-1,4,5,6-Tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine compound with 4,4'-methylenebis[3-hydroxy-2-naphthoate].

Antiminth; Combantrin; Cobantril; Early Bird; Helmex; Helmintox; Piranver; CP-10423-16; component of: Drontal, Drontal Plus, HeartGard Plus. Anthelmintic. Targets nematodes. Insoluble in H_2O. *Roerig Div., Pfizer Pharmaceuticals; Bayer Corp.; Merck & Co., Inc.*

72 Pyrantel Tartrate

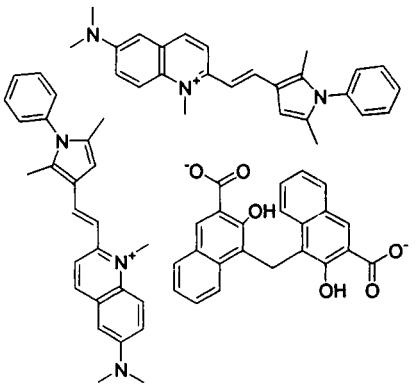
33401-94-4 8139 251-501-8

$C_{15}H_{20}N_2O_6S$

(E)-1,4,5,6-Tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine tartrate (1:1).

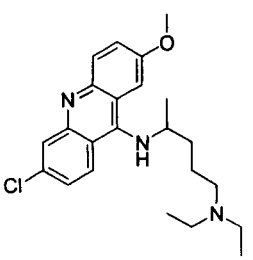
Banminth; Strongid; CP-10423-18. Anthelmintic. Targets nematodes. mp = 148-150°; λ_{max} = 312 nm (log ε 4.27 H_2O). *Pfizer Inc.*

73 Pyrvinium Pamoate
3546-41-6 8206 222-596-3



$C_{75}H_{70}N_6O_6$
6-(Dimethylamino)-2-[2-(2,5-dimethyl-1-phenylpyrrol-3-yl)vinyl]-1-methylquinolinium 4,4'-methylene-bis[3-hydroxy-2-naphthoate] (2:1).
Povan; pyrvinium embonate; viprynium embonate; Molevac; Neo-Oxypaat; Pamovin; Poquil; Povanil; Pyrcon; Tru; Vanquin; Vermitibier. Anthelmintic. Targets nematodes. mp = 210-215°; λ_m = 236, 356, 503 nm; insoluble in H_2O, Et_2O; slightly soluble in EtOH, $CHCl_3$, methoxyethanol. *Parke-Davis.*

74 Quinacrine
83-89-6 8225 201-508-7

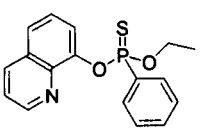


$C_{23}H_{30}ClN_3O$
6-Chloro-9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy-acridine.
mepacrine. Anthelmintic and antimalarial. An acridine derivative. Targets cestodes. *Sterling Winthrop, Inc.*

75 Quinacrine Dihydrochloride Dihydrate
6151-30-0 8225
$C_{23}H_{32}Cl_3N_3O.2H_2O$
6-Chloro-9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxyacridine dihydrochloride dihydrate.
Atabrine hydrochloride; RP-866; SN-390. Anthelmintic and antimalarial. Targets cestodes. Used as an antiprotozoal and teniacide in veterinary medicine. mp = 248-250° (dec); soluble in H_2O (2.9 g/100 ml); more soluble in hot H_2O; slightly soluble in EtOH, MeOH; insoluble in Et_2O, C_6H_6, Me_2CO; pH (1% aqueous solution) ~ 4.5; exhibits fluorescence under uv light. *Sterling Winthrop, Inc.*

76 Quinacrine Methanesulfonate Monohydrate
6598-46-5 8225
$C_{25}H_{38}ClN_3O_7S_2.H_2O$
6-Chloro-9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxyacridine monomethanesulfonate monohydrate.
Anthelmintic and antimalarial. Targets cestodes. Soluble in H_2O (33 g/100 ml at 15°), EtOH (2.8 g/100 ml); pH (2.0% w/v solution in H_2O) = 3.0 – 5.0. *Sterling Winthrop, Inc.*

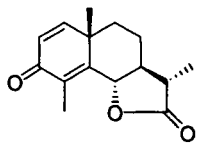
77 Quintiofos
1776-83-6 217-208-4



$C_{17}H_{16}NO_2PS$
O-Ethyl O-(8-quinolyl)-phenylphosphonothioate.
Bayer 9037. Ixodicide. *Bayer AG.*

78 α-Santonin

481-06-1 8509 207-560-7



$C_{15}H_{18}O_3$

[3S-(3α,3aα,5aβ,9bβ)]-3a,5,5a,9b-Tetrahydro-3,5a,9-trimethyl-naphtho[1,2-b]furan-2,8(3H,4H)dione.

l-Santonin. Anthelmintic. Targets nematodes. [(-)-form]: mp = 170-173°; $[\alpha]_D^{25}$ = -170° to -175° (c = 2 EtOH); d = 1.187; soluble in H_2O (0.02 g/100 ml at 25°, 0.4 g/100 ml at 100°), 50% EtOH (0.36 g/100 ml at 25°, 10 g/100 ml at 76°), 90% EtOH (2.3 g/100 ml at 25°, 33.3 g/100 ml at 76°), Et_2O (0.8 g/100 ml at 25°), 1.4 g/100 ml at 34.6°), $CHCl_3$ (23.2 g/100 ml at 25°); [±-form]: mp = 181°; λ_m = 241 nm (log ε 4.10 EtOH); [(+)-form]: mp = 172°; $[\alpha]_D^{20}$ = 165.9° (C = 1.92 EtOH).

79 Sodium Antimonylgluconate

12550-17-3 742 235-699-3

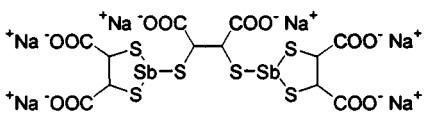
$C_6H_8NaO_7Sb$

Trivalent antimony complex with sodium gluconate.

Triostam. Anthelmintic. Targets schisto-soma. Soluble in H_2O, insoluble in organic solvents. *Burroughs Wellcome.*

80 Stibocaptate

27279-76-1 8966



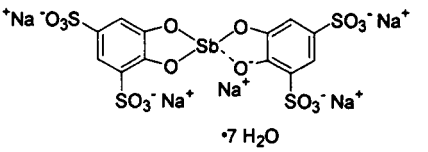
$C_{12}H_6Na_6O_{12}S_6Sb_2$

2,2'-[(1,2-Dicarboxy-1,2-ethanediyl)-bis(thio)]bis-1,3,2-dithiastibolane-4,5-dicarboxylic acid hexasodium salt.

TWSb; Ro-4-1544/6; SB-58; Astiban. Anthelmintic. Targets schistosoma. Soluble in H_2O, LD_{50} (mus sc) = 500 mg Sb/kg. *Hoffmann-LaRoche Inc.*

81 Stibophen

15489-16-4 8967



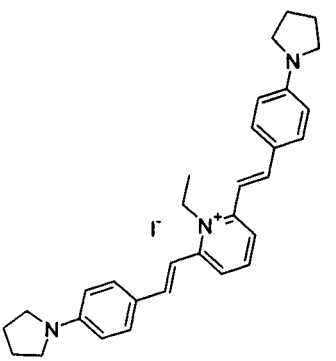
$C_{12}H_4Na_5O_{16}S_4Sb.7H_2O$

(T-4)-Bis[4,5-dihydroxy-1,3-benzenedisulfonato(4-)-O^4,O^5-]-antimonate(5-) pentasodium heptahydrate.

Sdt-91; Fuadin; Fouadin; Fantorin; Neoantimosan; Repodral. Anthelmintic. Targets schistosoma. Soluble in cold H_2O; insoluble in EtOH, Et_2O, $CHCl_3$; Me_2CO, petroleum ether; LD_{50} (rbt iv) ≅ 90 mg/kg. *Heyden Chemical; I.G. Farben; Sterling Winthrop, Inc.*

82 Stilbazium Iodide

3784-99-4 8971 223-247-8



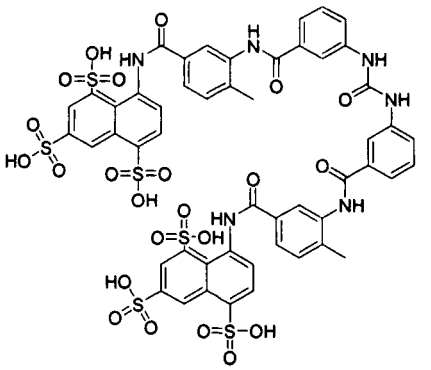
$C_{31}H_{36}IN_3$

1-Ethyl-2,6-bis[2-[4-(1-pyrrolidinyl)phenyl]ethenyl]pyridinium iodide.

BW-61-32; Monopar. Anthelmintic. Targets nematodes. mp = 282-283°; insoluble in hot MeOH; LD_{50} (mus ip) = 7 mg/kg, (mus orl) = 1360 mg/kg. *Burroughs Wellcome.*

83 Suramin Sodium

129-46-4 9181 204-949-3



$C_{51}H_{34}N_6Na_6O_{23}S_6$

8,8'-[Carbonylbis[imino-3,1-phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis-1,3,5-naphthalenetrisulfonic acid hexasodium salt.

Bayer 205; Fourneau 309; Antrypol; Germanin; Moranyl; Naganol; Naphuride. Anthelmintic and antiprotozoal (trypanosoma). Targets nematodes. Freely soluble in H_2O; poorly soluble in EtOH; insoluble in Et_2O, $CHCl_3$, petroleum ether; LD_{50} (mus iv) ≅ 620 mg/kg. *Bayer AG.*

84 Tetrachloroethylene

127-18-4 9332 204-825-9

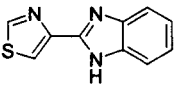
C_2Cl_4

Tetrachloroethene.

perchloroethylene; ethylene tetrachloride; Nema; Tetracap; Tetropil; Perclene; Ankilostin; Didakene. Anthelmintic. Targets nematodes and trematodes. d_4^{15} = 1.6311; d_4^{20} = 1.6230; bp = 121°; mp ≅ -22°; almost insoluble in H_2O, miscible with most organic solvents; LD_{50} (mus orl) = 8850 mg/kg, LC_{50} (mus ihl) = 5925 ppm.

85 Thiabendazole

148-79-8 9426 205-725-8



$C_{10}H_7N_3S$

2-(4-Thiazolyl)-1H-benzimidazole.

2-(4-benzimidazole)thiazole. MK-360; Omnizole; Thiaben; Thibenzole; Bovizole; Eprofil; Equizole; Mintezol; Top Form Wormer; Mertect; Lombristop; Minzolum; Nemapan; Polival; TBZ; Tecto. Anthelmintic. Targets nematodes. Also used as a fungicide (veterinary). mp = 304-305°; λ_m = 298 nm (ε 23330 MeOH); slightly soluble in H_2O (3.84 g/100 ml at pH 2.2), soluble in DMF, DMSO; slightly soluble in alcohols, esters, chlorocarbons; LD_{50} (mus orl) = 3600 mg/kg, (rat orl) = 3100 mg/kg, (rbt orl) > 3800 mg/kg. *Merck & Co., Inc.*

86 Thiabendazole Hypophosphite

28558-32-9 9426

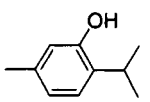
$C_{10}H_8ClN_3S$

2-(4-Thiazolyl)-1H-benzimidazole hydrochloride.

Anthelmintic. Targets nematodes. Amber liquid; d^{25} = 1.103. *Merck & Co., Inc.*

87 Thymol

89-83-8 9540 201-944-8



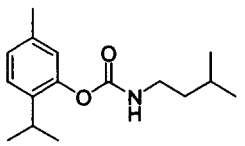
$C_{10}H_{14}O$

5-Methyl-2-(1-methylethyl)phenol.

3-p-cymenol; thyme camphor; m-thymol. Anthelmintic. Targets nematodes. bp ≅ 233°; mp = 51.5°; d_4^{25} = 0.9699; soluble in H_2O (0.1 g/100

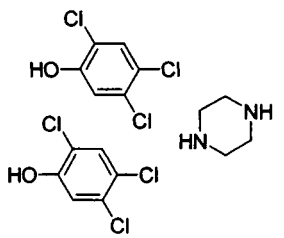
ml), EtOH (100 g/100 ml), $CHCl_3$ (143 g/100 ml); Et_2O (66.7 g/100 ml), olive oil (142.8 g/100ml at 25°); LD_{50} (rat orl) = 980 mg/kg.

88 Thymol N-Isoamylcarbamate
578-20-1 9550



$C_{16}H_{25}NO_2$
Isoamylcarbamic acid thymyl ester.
Egressin. Anthelmintic. Targets nematodes. mp = 57°; insoluble in H_2O. *E. Merck.*

89 Triclofenol Piperazine
5714-82-9 9787

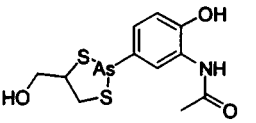


$C_{16}H_{16}Cl_6N_2O_2$
2,4,5-Trichlorophenol compound with piperazine (2:1).
CI-416; Ranestol. Anthelmintic. Targets nematodes. mp = 109-110°. *Parke-Davis.*

90 Urea Stibamine
1340-35-8 10010
MF Unknown
Carbostibamide. Antiprotozoal (Leishmania). Anthelmintic. Targets nematodes and schistosoma. Soluble in H_2O, partly soluble in EtOH, Et_2O. *Bristol-Myers Squibb Co.*

Antiamebics

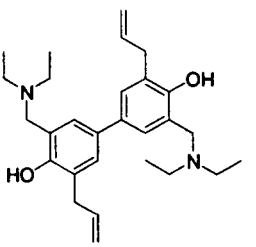
91 Arsthinol
119-96-0 852 204-361-7



$C_{11}H_{14}AsNO_3S_2$
3-Hydroxypropylene ester of 3-acetamido-4-hydroxydithiobenzenearsonous acid.
Mercaptoarsenol; Balarsen. Antiamebic. mp = 163-166°; slightly soluble in H_2O, Et_2O; soluble in EtOH (2.9 g/ml).

92 Berythromycin
527-75-3
$C_{37}H_{67}NO_{12}$
12-Deoxyerythromycin.
Abbott-24091. Antiamebic macrolide antibacterial. *Abbott Labs.*

93 Bialamicol
493-75-4 1242



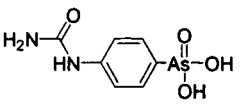
$C_{28}H_{40}N_2O_2$
5,5'-Diallyl-α,α'-bis(diethylamino)-m,m'-bitolyl-4,4'-diol.
Camoform; Biallylamicol; SN-6771; PAA-701. Antiamebic. *Parke-Davis.*

94 Bialamicol Dihydrochloride
3624-96-2 1242
$C_{28}H_{42}Cl_2N_2O_2$
5,5'-Diallyl-α,α'-bis(diethylamino)-m,m'-bitolyl-4,4'-diol dihydrochloride.

Camoform hydrochloride; CAM-807; CI-301; PAA-701; NSC-6386. Antiamebic. mp = 209-210°; soluble in H_2O. *Parke-Davis.*

95 Carbarsone

121-59-5 1830 204-484-6



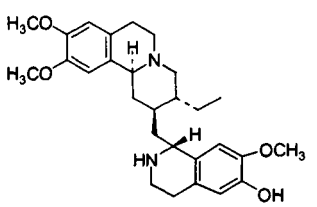
$C_7H_9AsN_2O_4$

N-Carbamoylarsanilic acid.

p-arsonophenylurea; p-ureidobenzenearsonic acid; N-carbamylarsanilic acid; p-carbamidobenzenearsonic acid; Amabevan; Ameban; Amibiarson; Arsambide; Carb-O-Sep; Histocarb; Fenarsone; Leucarsone; Aminarsone; Amebarsone. Antiamebic. Antihistomonad in turkeys. mp = 174°; slightly soluble in H_2O, EtOH; insoluble in Et_2O, $CHCl_3$; LD_{50} (rat orl) = 510 mg/kg. *Sankyo.*

96 Cephaeline

483-17-0 2020 207-591-6



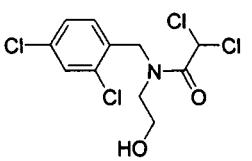
$C_{28}H_{38}N_2O_4$

7',10,11-Trimethoxyemetan-6'-ol.

dihydropsychotrine; desmethylemetine. Antiamebic and emetic. An alkaloid of ipecac. mp= 115-116°; $[\alpha]_D^{20}$ = -43.4° (c = 2 $CHCl_3$); insoluble in H_2O; soluble in MeOH, EtOH, Me_2CO, $CHCl_3$; less soluble in Et_2O, petroleum ether; [dihydrochloride heptahydrate]: mp = 270°; soluble in H2O; moderately soluble in Me_2CO, $CHCl_3$; nearly insoluble in C_6H_6; [Dihydrobromide heptahydrate]: mp = 293°; soluble in H2O; moderately soluble in alcohol; Me_2CO; nearly insoluble in C_6H_6.

97 Chlorbetamide

97-27-8 2126



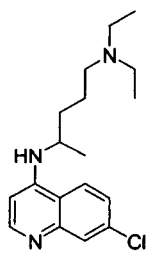
$C_{11}H_{11}Cl_4NO_2$

2,2-Dichloro-N-2,4-dichlorobenzyl-N-2-hydroxyethylacetamide.

Mantomide; Win-5047; Pontalin. Antiamebic. mp = 112.4-113.4°; slightly soluble in H_2O, more soluble in EtOH (< 5 g/100 ml). *Sterling Winthrop, Inc.*

98 Chloroquine

54-05-7 2215 200-191-2

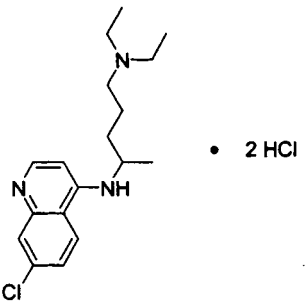


$C_{18}H_{26}ClN_3$

7-Chloro-4-[[4-(diethylamino)-1-methylbutyl]amino]quinoline.

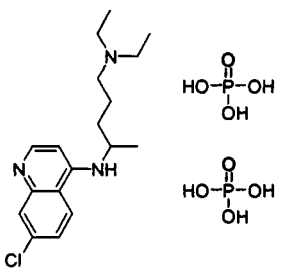
Aralen; SN-7618; RP-3377; Artrichin; Bemaphate; Capquin; Nivaquine B; Resoquine; Reumachlor; Sanoquin; [sulfate]: nivaquine. Antiamebic, antimalarial. mp = 87°. *Sterling Winthrop, Inc.*

99 Chloroquine Dihydrochloride
3545-67-3 2215 222-592-1



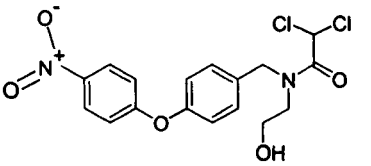
$C_{18}H_{28}Cl_3N_3$
7-Chloro-4-[[4-(diethylamino)-1-methylbutyl]amino]quinoline dihydrochloride.
Aralen hydrochloride. Antiamebic, antimalarial. *Sterling Winthrop, Inc.*

100 Chloroquine Diphosphate
50-63-5 2215 200-055-2



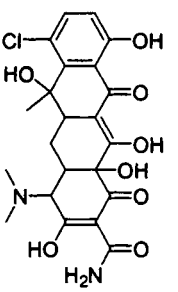
$C_{18}H_{32}ClN_3P_2O_8$
7-Chloro-4-[[4-(diethylamino)-1-methylbutyl]amino]quinoline diphosphate.
Aralen phosphate; Arechin; Avloclor; Imagon; Malaquin; Resochin; Tresochin. Antiamebic, antimalarial and antirheumatic. Also has activity as a lupus erythematosus suppressant. mp = 193-195°, 215-218°; soluble in H_2O, insoluble in organic solvents. *Sterling Winthrop, Inc.*

101 Chlorphenoxamide
3576-64-5 2233 222-694-6



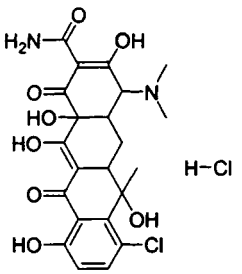
$C_{17}H_{16}Cl_2N_2O_5$
2,2-Dichloro-N-(2-hydroxyethyl)-n-[[4-(4-nitrophenoxy)phenyl]methyl]-acetamide.
clefamide; chlorophenoxamide; Mebinol. Antiamebic. mp = 136-137°; insoluble in H_2O; soluble in EtOH, Me_2CO, dioxane; LD_{50} (mus orl) > 5000 mg/kg, (mus ip) = 2000 mg/kg. *Farmitalia Carlo Erba SpA.*

102 Chlortetracycline
57-62-5 2245 200-341-7



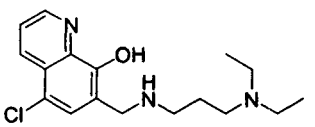
$C_{22}H_{23}ClN_2O_8$
7-Chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacene-carboxamide.
7-chlorotetracycline; Acronize; Aureocina; Aureomycin; Biomitsin; Centraureo; Chrusomykine; Orospray. Antiamebic and antiprotozoal. mp = 168-169°; $[\alpha]_D^{23}$ = -275.0° (MeOH); λ_m = 230, 262.5, 367.5 nm (0.1N HCl), 255, 285, 345 nm (0.1N NaOH); soluble in H_2O (0.5-0.6 mg/ml), cellosolves, dioxane, carbitol; poorly soluble in other organic solvents. *Lederle Labs.; Fermenta Animal Health Co.*

103 Chlortetracycline Hydrochloride
64-72-2 2245 200-591-7



$C_{22}H_{24}Cl_2N_2O_8$
7-Chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacene-carboxamide monohydrochloride.
Aureomycin; Fermycin Soluble; Aureociclina; Isphamycin. Antiamebic and antiprotozoal. mp > 210° (dec); $[\alpha]_D^{23}$ = -240°; soluble in H_2O (8.6 mg/ml), MeOH (17.4 mg/ml), EtOH (1.7 mg/ml); insoluble in Me_2CO, Et_2O; $CHCl_3$, dioxane; LD_{50} (rat orl) = 10300 mg/kg. *Lederle Labs.; Fermenta Animal Health Co.*

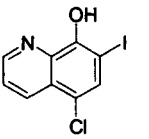
104 Clamoxyquin
2545-39-3



$C_{17}H_{24}ClN_3O$
5-Chloro-7-[[[3-(diethylamino)propyl]-amino]methyl]-8-quinolinol.
Antiamebic. *Parke-Davis.*

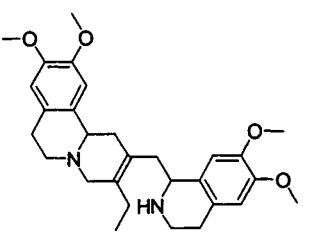
105 Clamoxyquin Hydrochloride
4724-59-8
$C_{17}H_{26}Cl_3N_3O$
5-Chloro-7-[[[3-(diethylamino)propyl]-amino]methyl]-8-quinolinol dihydrochloride.
Clamoxyl; CI-433; CN-17900-2B; PAA-3854; NSC-20246. Antiamebic. *Parke-Davis.*

106 Clioquinol
130-26-7 5052 204-984-4



C_9H_5ClINO
5-Chloro-7-iodo-8-quinolinol.
Domeform-HC; Quin-O-Crème; Rheaform Boluses; Vioform; Cort-Quin; Formtone-HC; Lidaform-HC; Nystaform; Nystaform-HC; Racet; Vioform-Hydrocortisone; Amebil; Alchloquin; Amoenol; Bactol; Barquinol; Budoform' Chinoform; Clioquinol; Cliquinol; Eczecidin; Enteroquinol; Entero-Septol; Entero-Vioform; Enterozol; Entrokin; Hi-Eneterol; Iodoenterol; Nioform; Quinambicide; Rometin; Vioform; Vioformio. Antiamebic. Also used as a topical anti-infective. mp = 178-179° (dec); λ_m = 266 nm ($A_1^{1\%}{}_{cm}$ 990 H_2O/HCl), 269 nm ($A_1^{1\%}{}_{cm}$ 1120 (MeOH/KOH), 255 nm ($A_1^{1\%}{}_{cm}$ 1570 EtOH); soluble in EtOH (7.8 mg/ml), EtOAC (58.8 mg/ml), AcOH (5.9 mg/ml); insoluble in H_2O, EtOH, Et_2O; LD_{50} (cat orl) = 400 mg/kg. *Bayer AG; Marion Merrell Dow Inc.; Ciba-Geigy Corp.; Dermik Labs., Inc.; Lemmon Co.*

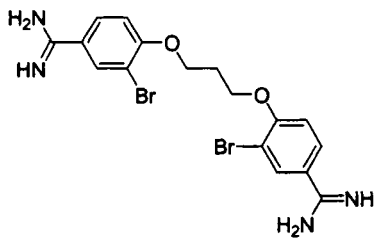
107 Dehydroemetine
4914-30-1 2924 225-542-7



$C_{29}H_{38}N_2O_4$
3-Ethyl-9,10-dimethoxy-1,6,7,11b-tetrahydro-2-[(1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolyl)methyl]-4H-benzo[a]quinolizine.

Ro-1-9334/19; 2,3-dehydroemetine; 2-dehydroemetine; Damatin [as (±)-form dihydrochloride]; Mebadin [as (±)-form dihydrochloride]. Antiamebic. The (-) form is therapeutically active. Analog of emetine. mp = 94-96°; $[\alpha]_D$ = -183°; [(±)-form dihydrochloride]: mp = 235°. *Hoffmann-LaRoche Inc.*

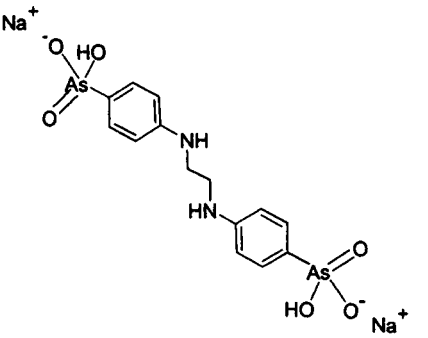
108 Dibromopropamidine
496-00-4 3073



$C_{17}H_{18}Br_2N_4O_2$
4,4'-(Trimethylenedioxy) bis(3-bromobenzamidine).
2',2''-dibromo-4',4''-diamidino-1,3-diphenoxypropane; dibrompropamidine. Antiseptic and antiamebic. Also used as a preservative in cosmetics. *May & Baker Ltd.*

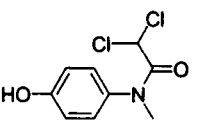
109 Dibromopropamidine Isethionate
614-87-9 3073 210-399-5
$C_{21}H_{30}Br_2N_4O_{10}S_2$
4,4'-(Trimethylenedioxy) bis(3-bromobenzamidine) di(2-hydroxyethanesulfonate) (ester).
dibrompropamidine isethionate; Brulidine; Brolene Ointment. Antiseptic and antiamebic. Also used as a preservative in cosmetics. mp = 226°; soluble in H_2O (0.5 g/ml), EtOH (1.6 g/100 ml), glycerol; insoluble in Et_2O, $CHCl_3$, petroleum ether; aqueous solutions are very acidic; incompatible with chlorides, sulfates, many organic anions (forms sparingly soluble salts). *May & Baker Ltd.*

110 Difetarsone
515-76-4 3394 208-209-0



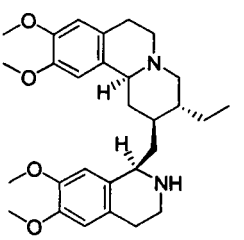
$C_{14}H_{16}As_2N_2Na_2O_6$
N,N-Ethylenediarsanilic acid disodium salt.
RP-4763; diphetarsone; Amebarsin; Bemarsal; Rodameb. Antiamebic. Soluble in H_2O; less soluble in EtOH; insoluble in Me_2CO, $CHCl_3$.

111 Diloxanide
579-38-4 3246 209-439-4



$C_9H_9Cl_2NO_2$
2,2-Dichloro-4'-hydroxy-N-methylacetanilide.
Entamide; Ame-Boots; [2-furoic acid ester] furamide; Histomibal; Miforon. Antiamebic. mp= 175°.

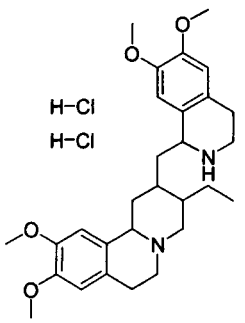
112 Emetine
483-18-1 3600 207-592-1



$C_{29}H_{40}N_2O_4$
6',7',10,11-Tetramethoxyemetan.

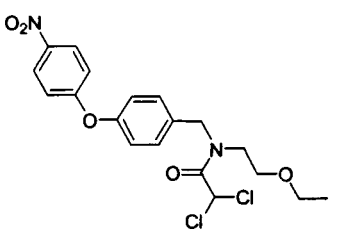
cephaeline methyl ether. Antiamebic. mp = 74°; $[\alpha]_D^{20}$ = -50° (c = 2 $CHCl_3$); soluble in MeOH, EtOH, $CHCl_3$, Me_2CO, EtOAc, $CHCXl_3$; less soluble in H_2O, petroleum ether; LD_{50} (rat ip) = 12.1 mg/kg.

113 Emetine Dihydrochloride
316-42-7 3600 206-259-8



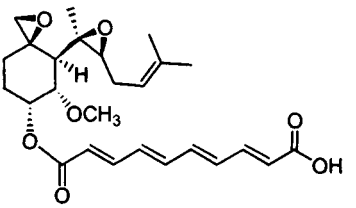
$C_{29}H_{42}Cl_2N_2O_4$
6',7',10,11-Tetramethoxyemetan dihydrochloride.
Hemometina. Antiamebic. mp = 235-255°; $[\alpha]_D$ = 11° (c = 1) to 21° (c = 8); soluble in H_2O (143 mg/ml), EtOH; LD_{50} (mus sc) = 32 mg/kg, (mus orl) = 30 mg/kg (calc. as free base).

114 Etofamide
25287-60-9



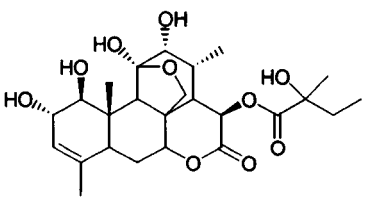
$C_{19}H_{20}Cl_2N_2O_5$
2,2-Dichloro-N-(2-ethoxyethyl)-n-[(p-nitrophenoxy)benzyl]acetamide.
Antiamebic.

115 Fumagillin
23110-15-8 4308 245-433-8



$C_{26}H_{34}O_7$
[3R-[3α,4α(2R*,3R*),5β,6β(all E)]]-2,4,6,8-Decatetraenedioic acid mono[5-methoxy-4-[2-methyl-3-(3-methyl-2-butenyl)oxiranyl]-1-oxapsiro[2.5]oct-6-yl] ester.
Amebacilin; Fugillin; Fumadil B; Fumidil. Antiamebic and antiprotozoal. mp = 194-195°; $[\alpha]_D^{25}$ = -26.6° (c = 1 in 95% EtOH); λ_m = 335, 351 nm (A 156.0, 1465.); insoluble in H_2O, soluble in most organic solvents; LD_{50} (mus sc) = 800 mg/kg.

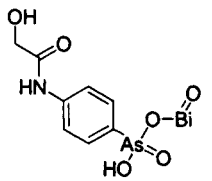
116 Glaucarubin
1448-23-3 4444



$C_{25}H_{36}O_{10}$
[1β,2α,11β,12α,15β(S)]-11,20-Epoxy-1,2,11,12-tetrahydroxy-15-(2-hydroxy-2-methyl-1-oxobutoxy)picras-3-en-16-one.
Glaumeba; α-Kirondrin. Antiamebic. mp = 250-255° (dec)$[\alpha]_D^{25}$ = 45° (c = 1.7 C_5H_5N), 69° (c = 0.6 MeOH); soluble in NaOH solutions, insoluble in NaHCO3 solutions, slightly soluble in H_2O (< 1.8 mg/ml). *Marion Merrell Dow Inc.*

117 Glycobiarsol

116-49-4 4503 204-143-1



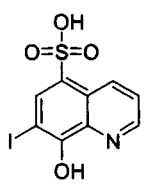
$C_8H_9AsBiNO_6$

(Hydrogen N-glycololoylarsanilato)-oxobismuth.

Dysentulin; Milibis; Viasept; Wintodon. Antiamebic. Slightly soluble in H_2O, EtOH; insoluble in Et_2O, $CHCl_3$, C_6H_6.

118 8-Hydroxy-7-iodo-5-quinolinesulfonic Acid

547-91-1 4872 208-938-4



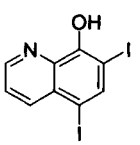
$C_9H_6INO_4S$

7-Iodo-8-hydroxyquinoline-5-sulfonic acid.

Ferron; Loretin. Antiamebic and antiseptic. mp = 260-270°; soluble in H_2O (2 g/l at 25°, 5.9 g/l at 100°), slightly soluble in EtOH, insoluble in other organic solvents.

119 Iodoquinol

83-73-8 5063 201-497-9



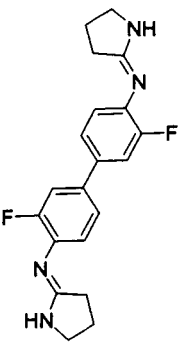
$C_9H_5I_2NO$

5,7-Diiodo-8-quinolinol.

SS-578; Diodoquin; Disoquin; Floraquin; Dyodin; Dinoleine; Searlewuin; Diodoxylin; Rafamebin; Ioquin; Direxiode; Stanquinate; Yodoxin; Zoaquin; Enterosept; Embequin. Antiamebic. mp = 200-215° (dec); insoluble in H_2O; sparingly soluble in EtOH, Et_2O, Me_2CO; soluble in hot C_5H_5N, dioxane. *Searle, G.D., & Co.*

120 Liroldine

105102-20-3



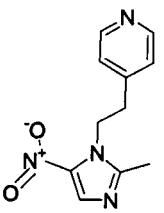
$C_{20}H_{20}F_2N_4$

2,2'-[(3,3'-Difluoro-4,4'-biphenylylene)dinitrolo]dipyridoline.

HL-707. Antiamebic. LD_{50} (mus ip) = 940 mg/kg.

121 Panidazole

13752-33-5 237-334-3

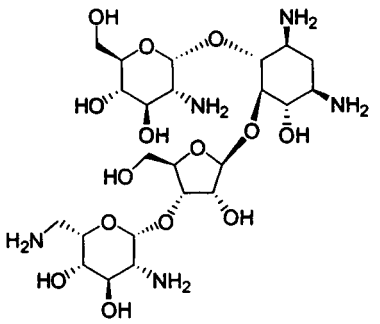


$C_{11}H_{12}N_4O_2$

4-[2-(2-Methyl-5-nitroimidazole-1-yl)-ethyl]pyridine.

Ameobicide.

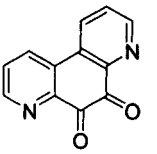
122 Paromomycin
7542-37-2 7173 231-423-0



$C_{23}H_{45}N_5O_{14}$
O-2,6-diamino-2,6-dideoxy-α-L-idopyranosyl-(1→3)-O-β-D-ribofuranosyl-(1→5)-O-[2-amino-2-deoxy-α-D-glucopyranosyl-(1→4)-2-deoxystreptamine.
Antiamebic. $[\alpha]_D^{25}$ = 65° ±3°; soluble in H_2O; less soluble in EtOH, MeOH; LD_{50} (rat orl) = 1625 mg/kg, (rat sc) > 650 mg/kg, (rat iv) = 156 mg/kg, (mus orl) > 2275 mg/kg, (mus sc) = 423 mg/kg, (mus iiv) = 90 mg/kg. *Parke-Davis.*

123 Paromomycin Sulfate
1263-89-4 7173 215-031-7
$C_{23}H_{45}N_5O_{14}.xH_2SO_4$
O-2,6-Diamino-2,6-dideoxy-α-L-idopyranosyl-(1→3)-O-β-D-ribofuranosyl-(1→5)-O-[2-amino-2-deoxy-α-D-glucopyranosyl-(1→4)-2-deoxystreptamine sulfate (salt).
Humatin; 1600 Antibiotic; FI-5853; Aminoxidin; Aminosidine; Farmiglucin; Farminosidin; Gabbromicina; Gabbromycin; Gabbroral; Humagel; Pargonyl; Paramicina; Paricina; Sinosid. Antiamebic. $[\alpha]_D^{20}$ = 50.5° (c = 1.5 H_2O, pH 6); LD_{50} (mus orl) > 15000 mg/kg, (mus sc) = 700 mg/kg, (mus iv) = 110 mg/kg. *Parke-Davis.*

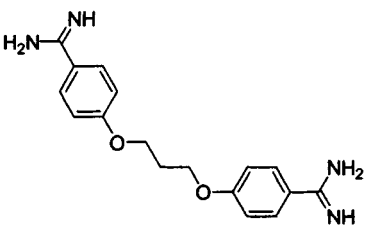
124 Phanquone
84-12-8 7337 201-516-0



$C_{12}H_6N_2O_2$
4,7-Phenanthroline-5,6-quinone.
Phanquinone; Phanchinone; phanquone; Ciba 11925; Entobex. Antiamebic. mp = 295° (dec); λ_m = 261 nm (ε 10000).

125 Polybenzarsol
54531-52-1 7723
Polymer of formaldehyde with 4-hydroxybenzenearsonic acid.
Benzocal; Benzodol. Antiamebic. Soluble in H_2O, alcoholic NaOH; LD_{50} (mmus ip) = 235 mg/kg. *Marion Merrell Dow Inc.*

126 Propamidine
104-32-5 7981 203-195-2

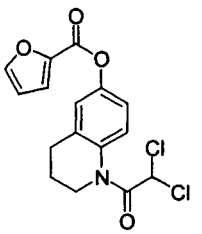


$C_{17}H_{20}N_4O_2$
4,4'-(Trimethylenedioxy)-dibenzamidine.
4,4'-diamidino-α,ω-diphenoxypropane. Antiamebic and antiprotozoal. *May & Baker Ltd.*

127 Propamidine Isethionate
140-63-6 7981 205-423-6
$C_{21}H_{32}N_4O_{10}S_2$
4,4'-(Trimethylenedioxy)-dibenzamidine isethionate.
M&B-782; Brolene Drops. Antiamebic and antiprotozoal. mp = 235°; soluble in H_2O (20 g/100 ml), EtOH (3 g/100

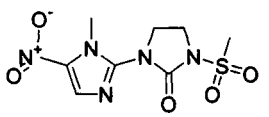
ml), glycerol; insoluble in Et_2O, $CHCl_3$, petroleum ether. *May & Baker Ltd.*

128 Quinfamide
62265-68-3 8241 263-478-1



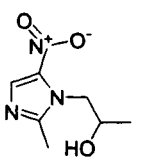
$C_{16}H_{11}Cl_2NO_4$
2-Furoic acid ester with 1-(dichloroacetyl)-1,2,3,4-tetrahydro-6-quinolinol.
Amenide; Amenox; Win-40014. Antiamebic. mp = 150.5-151°; soluble in Me_2CO, EtOH. *Sterling Winthrop, Inc.*

129 Satranidazole
56302-13-7



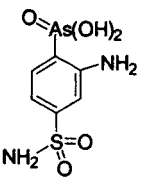
$C_8H_{11}N_5O_5S$
1-(1-Methyl-5-nitroimidazol-2-yl)-3-(methylsulfonyl)-2-imidazolidinone.
A nitroimidazole with high selective toxicity for anaerobic prokaryotes and eukaryotes. Antiamebic; antimicrobial; radiosensitizer.

130 Secnidazole
3366-95-8 8562 222-134-0



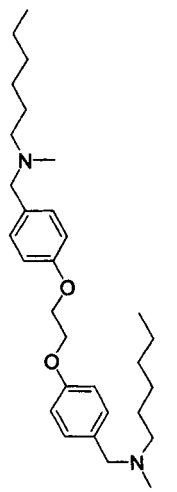
$C_7H_{11}N_3O_3$
2,α-Dimethyl-5-nitroimidazole-1-ethanol.
PM-185184; RP-14539; Flagentyl. Antiamebic. mp = 76°.

131 Sulfarside
1134-98-1 9110



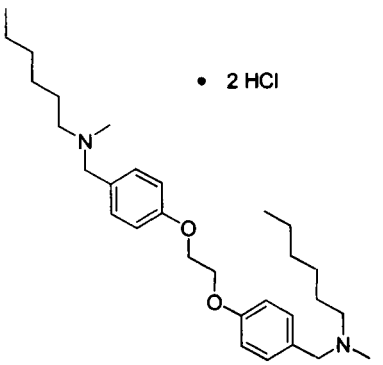
$C_6H_9AsN_2O_5S$
[2-Amino-4-(aminosulfonyl)phenyl]-arsinous acid.
RP-4482; Bemarside. Antiamebic. The sodium salt is used as an antiamebic. *Rhône-Poulenc Rorer Pharmaceuticals Inc.*

132 Symetine
15599-45-8



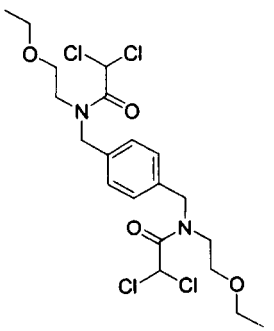
$C_{30}H_{48}N_2O_2$
4,4'-(Ethylenedioxy)bis[N-hexyl-N-methylbenzylamine].
Antiamebic. *Eli Lilly & Co.*

133 Symetine Hydrochloride
5585-62-6



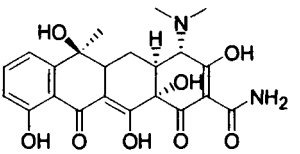
$C_{30}H_{50}Cl_2N_2O_2$
4,4'-(Ethylenedioxy)bis[N-hexyl-N-methylbenzylamine] dihydrochloride.
Antiamebic. *Eli Lilly & Co.*

134 Teclozan
5560-78-1 9262 226-934-0



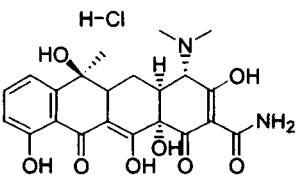
$C_{20}H_{28}Cl_4N_2O_4$
N,N'-(p-Phenylenedimethylene)-bis[2,2-dichloro-N-(2-ethoxyethyl)-acetamide.
Falmonox; Win-13146; Win-AM-13146; NSC-107433; teclosan; teclosine; teclozine. Antiamebic. mp= 137.6=143.9°; LD_{50} (mus orl) > 8000 mg/kg. *Sterling Winthrop, Inc.*

135 Tetracycline
60-54-8 9337 200-481-9



$C_{22}H_{24}N_2O_8$
(4S,4aS,5aS,6S,12aS)-4-(Dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide.
Liquamycin; Mysteclin-F; Talsutin; tsiklomitsin; Abricycline; Ambramycin; Bio-Tetra; Cyclomycin; Dumocyclin; Tetradecin. Antiamebic, antibacterial and antirickettsial. mp = 170-175° (dec); $[\alpha]_D^{25}$= -257.9° (0.1 N HCl), -239° (MeOH); λ_m = 220, 268, 355 nm (ε 13000, 18040, 13320 0.1N HCl); soluble in H_2O (1.7 mg/ml), MeOH (> 20 mg/ml); LD_{50} (rat orl) = 707mg/kg, (mus orl) = 808 mg/kg. *Pfizer Inc.; Bristol-Myers Squibb Co.*

136 Tetracycline Hydrochloride
64-75-5 9337 200-593-8



$C_{22}H_{26}Cl_2N_2O_8$
(4S,4aS,5aS,6S,12aS)-4-(Dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide monohydrochloride.
Achro; Achromycin; Ala-Tet; Cyclopar; Panmycin; Robitet; Steclin; Sumycin; TetraSURE; Ambracyn; Ambramicina; Bristaciclina; Cefracycline; Criseociclina; Cyclopar; Diocyclin; Helvecyclin; Hostacyclin; Imex; Mediletten; Mephacyclin; Panmycin; Partrex; Polycycline; Purociclina; Quadra-