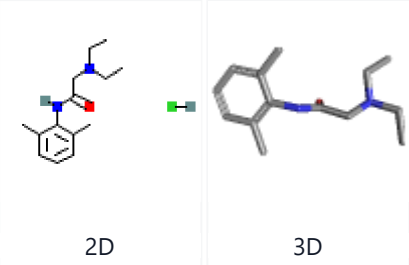
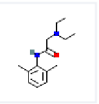
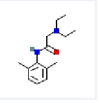
PubChem

COMPOUND SUMMARY

Lidocaine Hydrochloride

Cite | Download

PubChem CID	6314
Structure	 2D 3D
Chemical Safety	 Acute Toxic Irritant Health Hazard Laboratory Chemical Safety Summary (LCSS) Datasheet
Molecular Formula	$C_{14}H_{23}ClN_2O$
Synonyms	Lidocaine hydrochloride 73-78-9 LIDOCAINE HCL Xyloneural Lidothesin View More...
Molecular Weight	270.80 g/mol *Computed by PubChem 2.2 (PubChem release 2021.10.14)*
Parent Compound	 CID 3676 (Lidocaine)
Component Compounds	 CID 3676 (Lidocaine) CID 313 (Hydrochloric Acid)

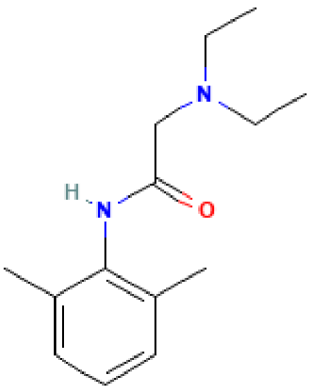
Dates	Create: 2005-06-24 Modify: 2024-11-16
Description	Lidocaine Hydrochloride is the hydrochloride salt form of **lidocaine**, an aminoethylamide and a prototypical member of the amide class anesthetics. **Lidocaine** interacts with voltage-gated Na+ channels in the nerve cell membrane and blocks the transient increase in permeability of excitable membranes to Na+. This prevents the generation and conduction of nerve impulses and produces a reversible loss of sensation. Lidocaine hydrochloride also exhibits class IB antiarrhythmic effects. The agent decreases the flow of **sodium** ions into myocardial tissue, especially on the Purkinje network, during phase 0 of the action potential, thereby decreasing depolarization, automaticity and excitability. ▸ NCI Thesaurus (NCIt) A local anesthetic and cardiac depressant used as an antiarrhythmia agent. Its actions are more intense and its effects more prolonged than those of PROCAINE but its duration of action is shorter than that of BUPIVACAINE or PRILOCAINE. ▸ Medical Subject Headings (MeSH)

Contents

1 Structures

1.1 2D Structure

Chemical Structure Depiction



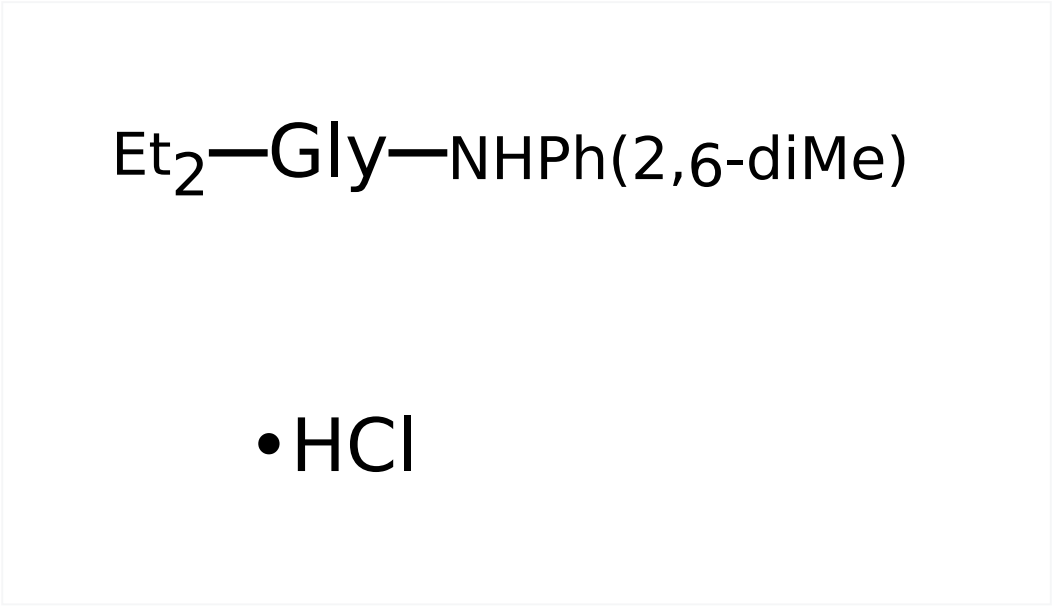
PubChem

1.2 3D Conformer

3D Conformer of Parent

PubChem

2 Biologic Description

SVG Image	
IUPAC Condensed	N(Et2)Gly-NHPh(2,6-diMe).HCl
Sequence	G

PubChem

3 Names and Identifiers

3.1 Computed Descriptors

3.1.1 IUPAC Name

2-(diethylamino)-*N*-(2,6-dimethylphenyl)acetamide;hydrochloride

Computed by Lexichem TK 2.7.0 (PubChem release 2021.10.14)

PubChem

3.1.2 InChI

InChI=1S/C14H22N2O.ClH/c1-5-16(6-2)10-13(17)15-14-11(3)8-7-9-12(14)4;/h7-9H,5-6,10H2,1-4H3,(H,15,17);1H

Computed by InChI 1.0.6 (PubChem release 2021.10.14)

PubChem

3.1.3 InChIKey

IYBQHJMYDGVZRY-UHFFFAOYSA-N

Computed by InChI 1.0.6 (PubChem release 2021.10.14)

- PubChem

3.1.4 SMILES

CCN(CC)CC(=O)NC1=C(C=CC=C1C)C.Cl

Computed by OEChem 2.3.0 (PubChem release 2021.10.14)

- PubChem

3.2 Molecular Formula

$C_{14}H_{23}ClN_2O$

Computed by PubChem 2.2 (PubChem release 2021.10.14)

- PubChem

3.3 Other Identifiers

3.3.1 CAS

73-78-9

- Australian Industrial Chemicals Introduction Scheme (AICIS); CAS Common Chemistry; ChemIDplus; DTP/...

6108-05-0

- European Chemicals Agency (ECHA)

3.3.2 Related CAS

137-58-6 (Parent)

- ChemIDplus

3.3.3 European Community (EC) Number

200-803-8

- European Chemicals Agency (ECHA)

612-079-4

- European Chemicals Agency (ECHA)

3.3.4 UNII

EC2CNF7XFP

- FDA Global Substance Registration System (GSRS)

3.3.5 ChEMBL ID

CHEMBL541521

- ChEMBL

3.3.6 DSSTox Substance ID

DTXSID4058782

- EPA DSSTox

3.3.7 KEGG ID

D02086

- KEGG

3.3.8 NCI Thesaurus Code

C48000

- NCI Thesaurus (NCIt)

C90650

- NCI Thesaurus (NCIt)

3.3.9 NSC Number

757420

- DTP/NCI

3.3.10 RXCUI

142440

- NLM RxNorm Terminology

1299236

- NLM RxNorm Terminology

3.3.11 Wikidata

Q27122094

- Wikidata

3.4 Synonyms

3.4.1 MeSH Entry Terms

2-(Diethylamino)-N-(2,6-Dimethylphenyl)Acetamide
2-2EtN-2MePhAcN
Dalcaine
Lidocaine
Lidocaine Carbonate
Lidocaine Carbonate (2:1)
Lidocaine Hydrocarbonate
Lidocaine Hydrochloride
Lidocaine Monoacetate
Lidocaine Monohydrochloride
Lidocaine Monohydrochloride, Monohydrate
Lidocaine Sulfate (1:1)
Lignocaine
Octocaine
Xylesthesin
Xylocaine
Xylocitin
Xyloneural

- Medical Subject Headings (MeSH)

3.4.2 Depositor-Supplied Synonyms

Lidocaine hydrochloride
73-78-9
LIDOCAINE HCL
Xyloneural
Lidothesin
Lignocaine hydrochloride
Xylocaine Viscous
Laryng-O-jet
Rucaina hydrochloride
Xycaine hydrochloride
Xylotox hydrochloride
Duncaine hydrochloride
Isicaine hydrochloride
Lidocain hydrochloride
Glydo
Anestacon hydrochloride
Xylocitin hydrochloride
Lidothesin hydrochloride
Xylestesin hydrochloride
LIDOCAINE VISCOUS
LTA II KIT
PEDIATRIC LTA KIT
LARYNG-O-JET KIT
Lidocaine (hydrochloride)
LIDOPEN
Xylocard
Zingo
Xylocaine hydr
EC2CNF7XFP
UNII-EC2CNF7X
XYLOCAINE PR
EINECS 200-803

Xilina hydrochloride	Gravocain hydrochloride	Lidocaine hydrochloride anhydrous	LARYNGOTRAC
Anestacon	Leostesin hydrochloride	Lidocaton	XYLOCAINE 4%

▸ PubChem

4 Chemical and Physical Properties

4.1 Computed Properties

Property Name	Property Value	Reference
Molecular Weight	270.80 g/mol	Computed by PubChem 2.2 (PubChem release 2021.10.14)
Hydrogen Bond Donor Count	2	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Hydrogen Bond Acceptor Count	2	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Rotatable Bond Count	5	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Exact Mass	270.1498911 g/mol	Computed by PubChem 2.2 (PubChem release 2021.10.14)
Monoisotopic Mass	270.1498911 g/mol	Computed by PubChem 2.2 (PubChem release 2021.10.14)
Topological Polar Surface Area	32.3Å^2	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Heavy Atom Count	18	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	228	Computed by Cactvs 3.4.8.18 (PubChem release 2021.10.14)
Isotope Atom Count	0	Computed by PubChem
Defined Atom Stereocenter Count	0	Computed by PubChem
Undefined Atom Stereocenter Count	0	Computed by PubChem
Defined Bond Stereocenter Count	0	Computed by PubChem
Undefined Bond Stereocenter Count	0	Computed by PubChem
Covalently-Bonded Unit Count	2	Computed by PubChem
Compound Is Canonicalized	Yes	Computed by PubChem (release 2021.10.14)

PubChem

4.2 Experimental Properties

4.2.1 Physical Description

Dry Powder

EPA Chemical Data Reporting (CDR)

4.2.2 Collision Cross Section

155.4 $Å^2$ $[M+H]^+$ [CCS Type: TW; Method: calibrated with polyalanine and drug standards]

https://pubs.acs.org/doi/abs/10.1021/acs.analchem.7b01709

CCSbase

4.3 Chemical Classes

4.3.1 Drugs

4.3.1.1 Human Drugs

Breast Feeding; Lactation; Milk, Human; Antiarrhythmics; Local Anesthetics

Drugs and Lactation Database (LactMed)

Human drug -> Discontinued

Drugs@FDA

Human drug -> Prescription

Drugs@FDA

Human drug -> Prescription; Discontinued

Drugs@FDA

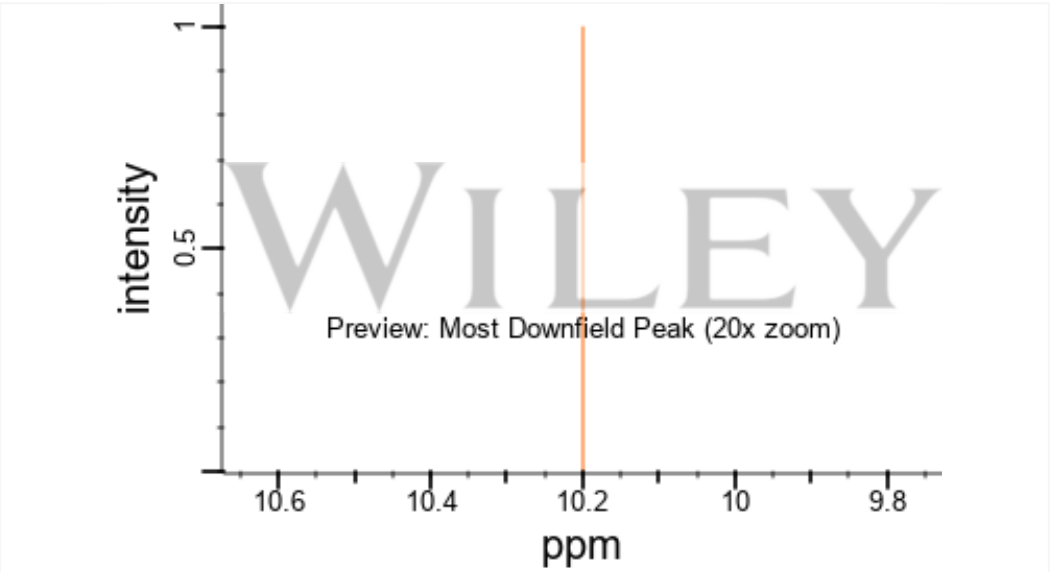
Human drug -> Prescription; Discontinued; Active ingredient (LIDOCAINE HYDROCHLORIDE)

Drugs@FDA

5 Spectral Information

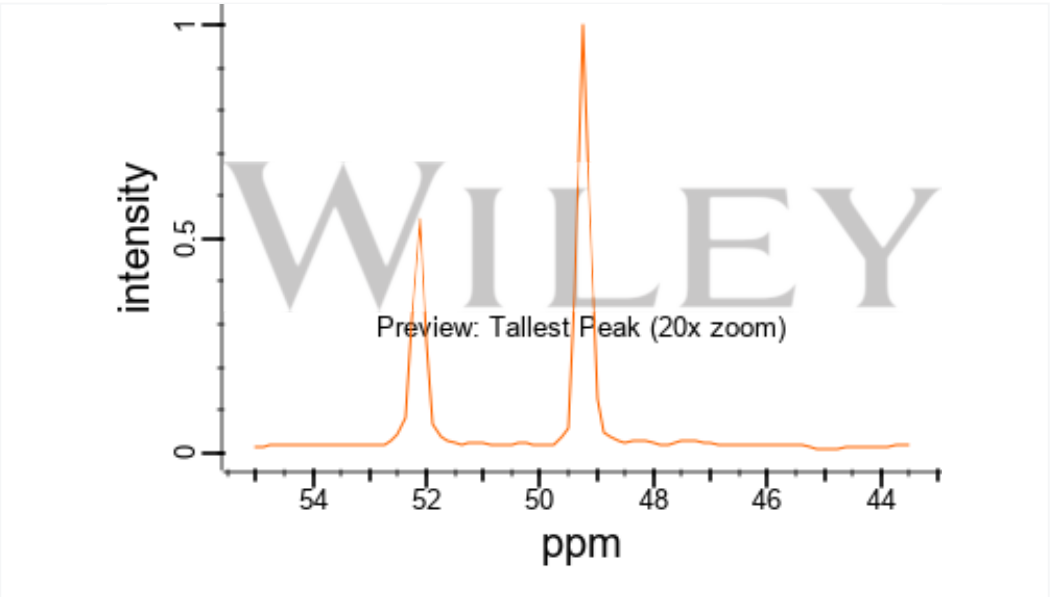
5.1 1D NMR Spectra

5.1.1 1H NMR Spectra

Instrument Name	Varian CFT-20
Copyright	Copyright © 2009-2024 John Wiley & Sons, Inc. All Rights Reserved.
Thumbnail	

▸ SpectraBase

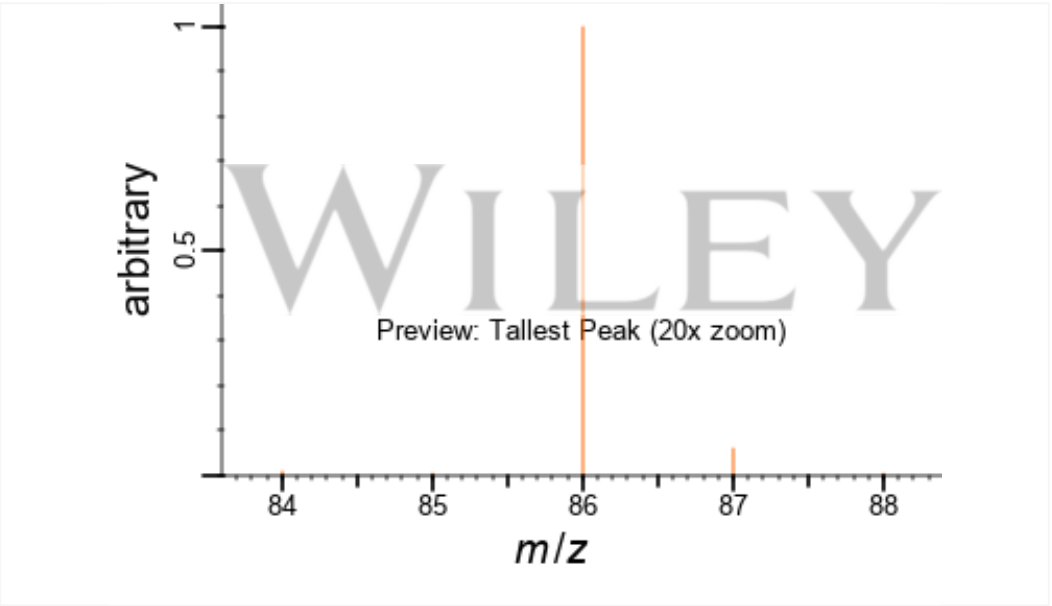
5.1.2 13C NMR Spectra

Source of Sample	Aldrich Chemical Company, Inc., Milwaukee, Wisconsin
Copyright	Copyright © 1980, 1981-2024 John Wiley & Sons, Inc. All Rights Reserved.
Thumbnail	

▸ SpectraBase

5.2 Mass Spectrometry

5.2.1 GC-MS

Source of Spectrum	Chemical Concepts, A Wiley Division, Weinheim, Germany
Copyright	Copyright © 2002-2024 Wiley-VCH Verlag GmbH & Co. KGaA. All Rights Reserved.
Thumbnail	

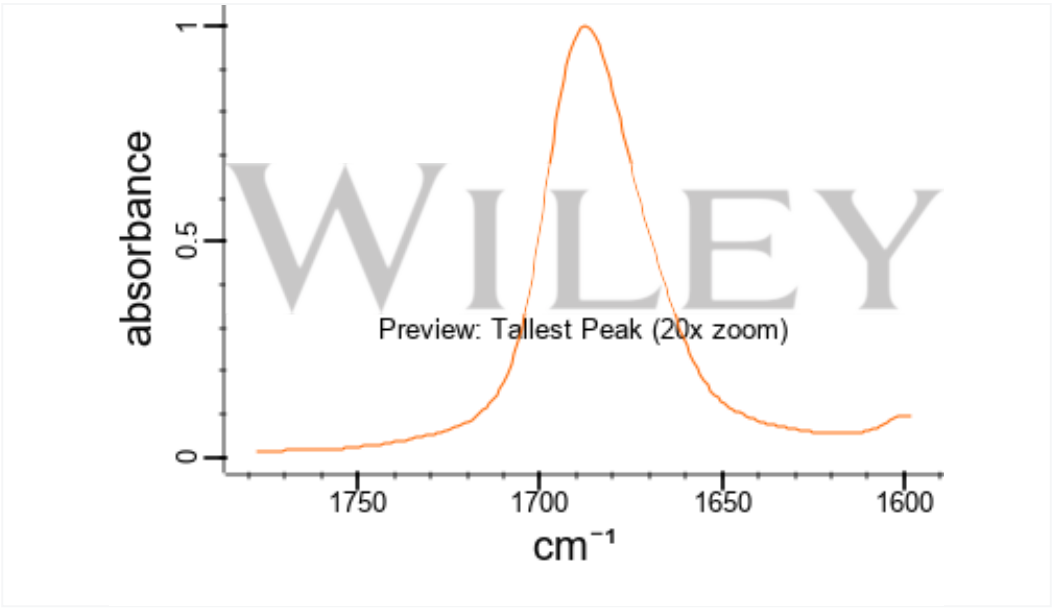
SpectraBase

5.3 IR Spectra

5.3.1 FTIR Spectra

Technique	KBr WAFER
Source of Sample	Aldrich Chemical Company, Inc., Milwaukee, Wisconsin
Catalog Number	S56416
Copyright	Copyright © 1980, 1981-2024 John Wiley & Sons, Inc. All Rights Reserved.

Thumbnail



SpectraBase

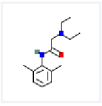
6 Related Records

6.1 Related Compounds with Annotation

Follow these links to do a live 2D search or do a live 3D search for this compound, sorted by annotation score. This section is deprecated (see here for details), but these live search links provide equivalent functionality to the table that was previously shown here.

PubChem

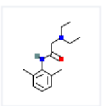
6.2 Parent Compound



CID 3676 (Lidocaine)

PubChem

6.3 Component Compounds



CID 3676 (Lidocaine)

CID 313 (Hydrochloric Acid)

PubChem

6.4 Related Compounds

Same Connectivity Count	4
Same Parent, Connectivity Count	58
Same Parent, Exact Count	46
Mixtures, Components, and Neutralized Forms Count	2
Similar Compounds (2D)	View in PubChem Search
Similar Conformers (3D)	View in PubChem Search

PubChem

6.5 Substances

6.5.1 PubChem Reference Collection SID

481107287

PubChem

6.5.2 Related Substances

Same Count	135

PubChem

6.5.3 Substances by Category

PubChem

6.6 Entrez Crosslinks

Gene Count	9

PubChem

7 Chemical Vendors

PubChem

8 Drug and Medication Information

8.1 Drug Classes

Breast Feeding; Lactation; Milk, Human; Antiarrhythmics; Local Anesthetics

Drugs and Lactation Database (LactMed)

8.2 FDA Approved Drugs

Drugs@FDA

8.3 FDA Orange Book

FDA Orange Book

8.4 FDA National Drug Code Directory

National Drug Code (NDC) Directory

8.5 Drug Labels

Drug and label

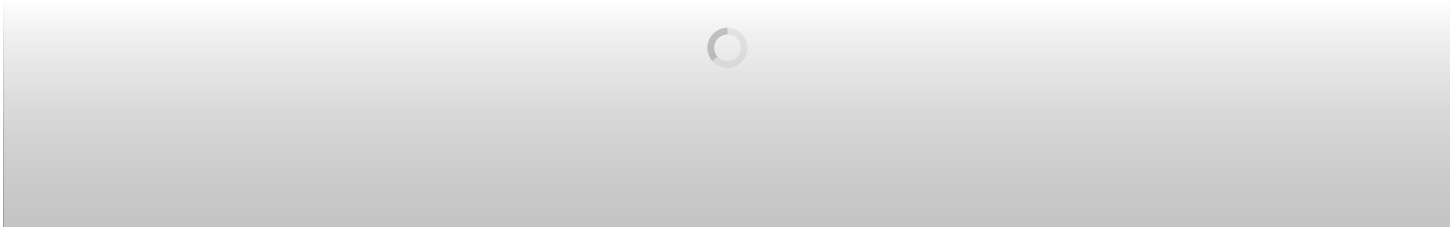
▸ DailyMed

Active ingredient and drug

▸ DailyMed

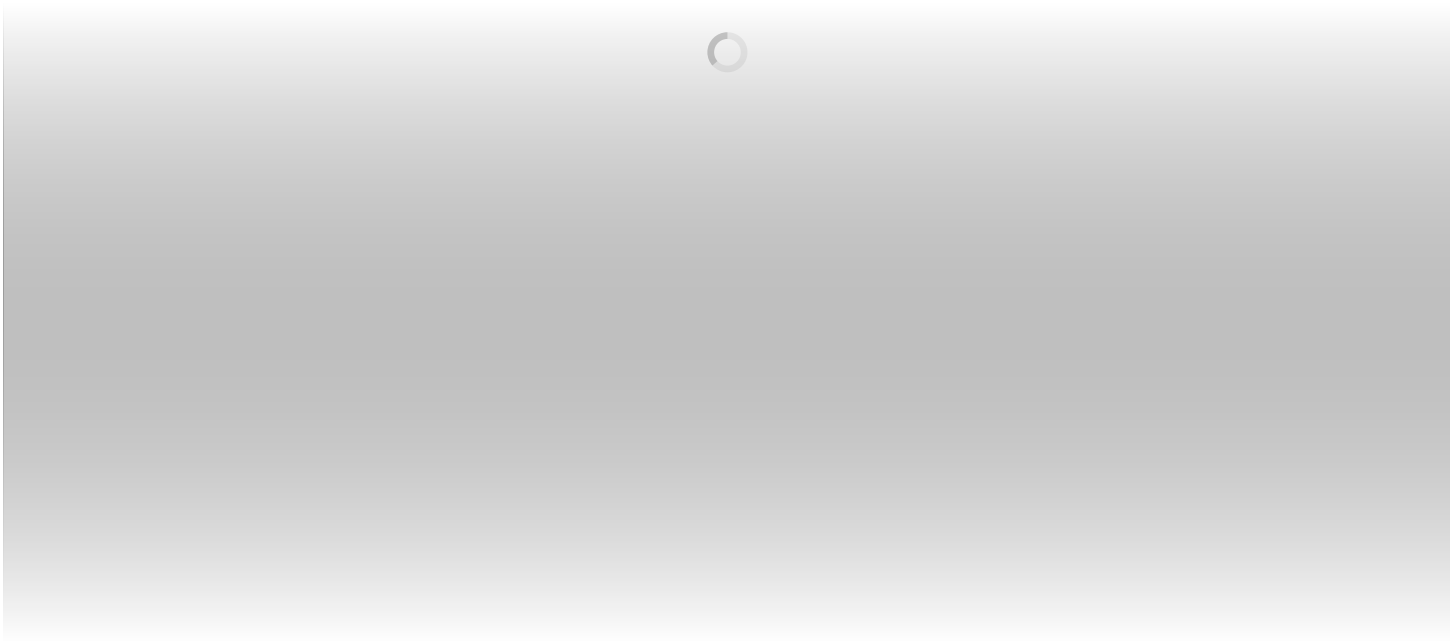
8.6 Clinical Trials

8.6.1 ClinicalTrials.gov



▸ ClinicalTrials.gov

8.6.2 EU Clinical Trials Register



▸ EU Clinical Trials Register

8.6.3 NIPH Clinical Trials Search of Japan

NIPH Clinical Trials Search of Japan

9 Pharmacology and Biochemistry

9.1 MeSH Pharmacological Classification

Voltage-Gated Sodium Channel Blockers

A class of drugs that inhibit the activation of VOLTAGE-GATED SODIUM CHANNELS. (See all compounds classified as Voltage-Gated Sodium Channel Blockers.)

Medical Subject Headings (MeSH)

Anti-Arrhythmia Agents

Agents used for the treatment or prevention of cardiac arrhythmias. They may affect the polarization-repolarization phase of the action potential, its excitability or refractoriness, or impulse conduction or membrane responsiveness within cardiac fibers. Anti-arrhythmia agents are often classed into four main groups according to their mechanism of action: sodium channel blockade, beta-adrenergic blockade, repolarization prolongation, or calcium channel blockade. (See all compounds classified as Anti-Arrhythmia Agents.)

Medical Subject Headings (MeSH)

Anesthetics, Local

Drugs that block nerve conduction when applied locally to nerve tissue in appropriate concentrations. They act on any part of the nervous system and on every type of nerve fiber. In contact with a nerve trunk, these anesthetics can cause both sensory and motor paralysis in the innervated area. Their action is completely reversible. (From Gilman AG, et. al., Goodman and Gilman's The Pharmacological Basis of Therapeutics, 8th ed) Nearly all local anesthetics act by reducing the tendency of voltage-dependent sodium channels to activate. (See all compounds classified as Anesthetics, Local.)

Medical Subject Headings (MeSH)

9.2 FDA Pharmacological Classification

1 of 3	
Non-Proprietary Name	LIDOCAINE HCL
Pharmacological Classes	Amide Local Anesthetic [EPC]; Antiarrhythmic [EPC]; Local Anesthesia [PE]; Amides [CS]

National Drug Code (NDC) Directory

2 of 3	
Non-Proprietary Name	LIDOCAINE HYDROCHLORIDE

Pharmacological Classes	Amides [CS]; Local Anesthesia [PE]; Antiarrhythmic [EPC]; Amide Local Anesthetic [EPC]

▸ National Drug Code (NDC) Directory

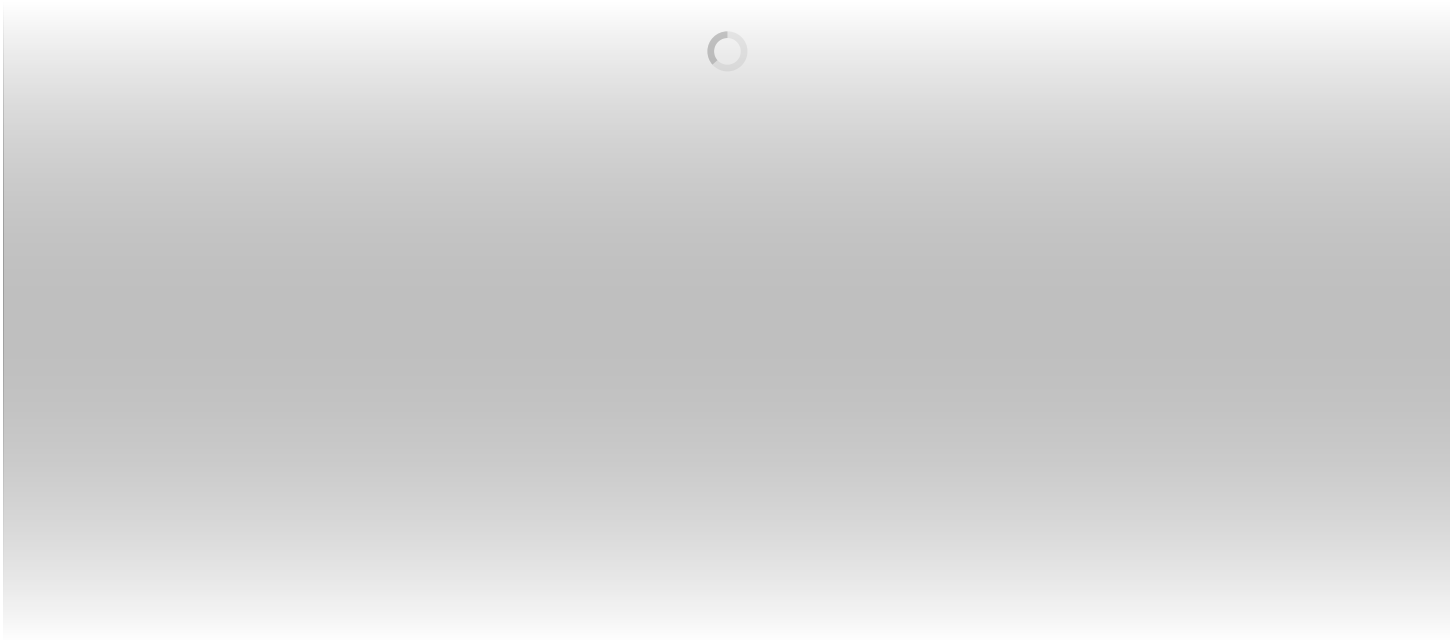
3 of 3	
Non-Proprietary Name	LIDOCAINE HYDROCHLORIDE ANHYDROUS
Pharmacological Classes	Antiarrhythmic [EPC]; Amide Local Anesthetic [EPC]; Amides [CS]; Local Anesthesia [PE]

▸ National Drug Code (NDC) Directory

10 Use and Manufacturing

10.1 Uses

EPA CPDat Chemical and Product Categories



The Chemical and Products Database, a resource for exposure-relevant data on chemicals in consumer products, Scientific Data, volume 5, Article number: 180125 (2018), ***DOI:10.1038/sdata.2018.125***

▸ EPA Chemical and Products Database (CPDat)

10.1.1 Use Classification

Human Drugs -> FDA Approved Drug Products with Therapeutic Equivalence Evaluations (Orange Book) -> Active Ingredients

▸ FDA Orange Book

10.1.2 Household Products

Household & Commercial/Institutional Products

Information on 1 consumer products that contain Lidocaine hydrochloride in the following categories is provided:

• Pet Care

▸ Consumer Product Information Database (CPID)

10.2 U.S. Production

Aggregated Product Volume

2018: 9,750 lb

2017: 28,500 lb

2016: 5,150 lb

https://www.epa.gov/chemical-data-reporting

▸ EPA Chemical Data Reporting (CDR)

10.3 General Manufacturing Information

EPA TSCA Commercial Activity Status

Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, hydrochloride (1:1): ACTIVE

▸ EPA Chemicals under the TSCA

11 Safety and Hazards

11.1 Hazards Identification

11.1.1 GHS Classification

1 of 2 View All

Pictogram(s)	 Acute Toxic Irritant Health Hazard
Signal	Danger
GHS Hazard Statements	H301 (46.3%): Toxic if swallowed [**Danger** Acute toxicity, oral] H302 (53.7%): Harmful if swallowed [**Warning** Acute toxicity, oral] H315 (40.3%): Causes skin irritation [**Warning** Skin corrosion/irritation] H319 (40.3%): Causes serious eye irritation [**Warning** Serious eye damage/eye irritation]

	H334 (37.3%): May cause allergy or asthma symptoms or breathing difficulties if inhaled [**Danger** Sensitization, respiratory] H335 (40.3%): May cause respiratory irritation [**Warning** Specific target organ toxicity, single exposure; Respiratory tract irritation] H412 (37.3%): Harmful to aquatic life with long lasting effects [Hazardous to the aquatic environment, long-term hazard]
Precautionary Statement Codes	P233, P260, P261, P264, P264+P265, P270, P271, P273, P280, P284, P301+P316, P301+P317, P302+P352, P304+P340, P305+P351+P338, P319, P321, P330, P332+P317, P337+P317, P342+P316, P362+P364, P403, P403+P233, P405, and P501 (The corresponding statement to each P-code can be found at the GHS Classification page.)
ECHA C&L Notifications Summary	*Aggregated GHS information provided per 67 reports by companies from 5 notifications to the ECHA C&L Inventory. Each notification may be associated with multiple companies.* *Information may vary between notifications depending on impurities, additives, and other factors. The percentage value in parenthesis indicates the notified classification ratio from companies that provide hazard codes. Only hazard codes with percentage values above 10% are shown.*

▸ European Chemicals Agency (ECHA)

11.1.2 Hazard Classes and Categories

Acute Tox. 3 (46.3%)

Acute Tox. 4 (53.7%)

Skin Irrit. 2 (40.3%)

Eye Irrit. 2 (40.3%)

Resp. Sens. 1 (37.3%)

STOT SE 3 (40.3%)

Aquatic Chronic 3 (37.3%)

▸ European Chemicals Agency (ECHA)

Acute Tox. 3 (82.5%)

Acute Tox. 4 (17.5%)

▸ European Chemicals Agency (ECHA)

11.2 Regulatory Information

New Zealand EPA Inventory of Chemical Status

Lidocaine hydrochloride: Does not have an individual approval but may be used under an appropriate group standard

▸ New Zealand Environmental Protection Authority (EPA)

11.3 Other Safety Information

Chemical Assessment

IMAP assessments - **Acetamide**, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, **monohydrochloride**: Environment tier I assessment

IMAP assessments - **Acetamide**, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, **monohydrochloride**: Human health tier I assessment

- Australian Industrial Chemicals Introduction Scheme (AICIS)

12 Toxicity

12.1 Toxicological Information

12.1.1 Effects During Pregnancy and Lactation

◉ Summary of Use during Lactation

Lidocaine concentrations in milk during continuous IV infusion, epidural administration and in high doses as a local anesthetic are low and the **lidocaine** is poorly absorbed by the infant. **Lidocaine** is not expected to cause any adverse effects in breastfed infants. No special precautions are required.

Lidocaine during labor and delivery with other anesthetics and analgesics has been reported by some to interfere with breastfeeding. However, this assessment is controversial and complex because of the many different combinations of drugs, dosages and patient populations studied as well as the variety of techniques used and deficient design of many of the studies. Overall it appears that with good breastfeeding support epidural **lidocaine** with or without **fentanyl** or one of its derivatives has little or no adverse effect on breastfeeding success. Labor pain medication may delay the onset of lactation.

◉ Effects in Breastfed Infants

Lidocaine in doses ranging from 60 to 500 mg administered to the mother by intrapleural or epidural routes during delivery had no effect on their 14 infants who were either breastfed or received their mother's breastmilk by bottle.

A neurology group reported using 1% **lidocaine** for peripheral nerve blocks in 14 nursing mothers with migraine. They reported no infant side effects and considered the procedure safe during breastfeeding.

◉ Effects on Lactation and Breastmilk

A randomized study compared three groups of women undergoing elective cesarean section who received subcutaneous infusion of 20 mL of **lidocaine** 1% plus **epinephrine** 1:100:000 at the incision site. One group received the **lidocaine** before incision, one group received the **lidocaine** after the incision, and the third received 10 mL before the incision and 10 mL after. Women in the pre-and post-incision administration group initiated breastfeeding earlier than those in the pre-incision administration (3.4 vs 4.1 hours). There was no difference between the post-incision administration group and the other groups in time to breastfeeding initiation.

A national survey of women and their infants from late pregnancy through 12 months postpartum compared the time of lactogenesis II in mothers who did and did not receive pain medication during

labor. Categories of medication were spinal or epidural only, spinal or epidural plus another medication, and other pain medication only. Women who received medications from any of the categories had about twice the risk of having delayed lactogenesis II (>72 hours) compared to women who received no labor pain medication.

An Egyptian study compared **lidocaine** 2% (n = 75) to **lidocaine** 2% plus **epinephrine** 1:200,000 (n = 70) as a wound infiltration following cesarean section. Patients who received **epinephrine** in combination with **lidocaine** began breastfeeding at 89 minutes following surgery compared to 132 minutes for those receiving **lidocaine** alone. The difference was statistically significant.

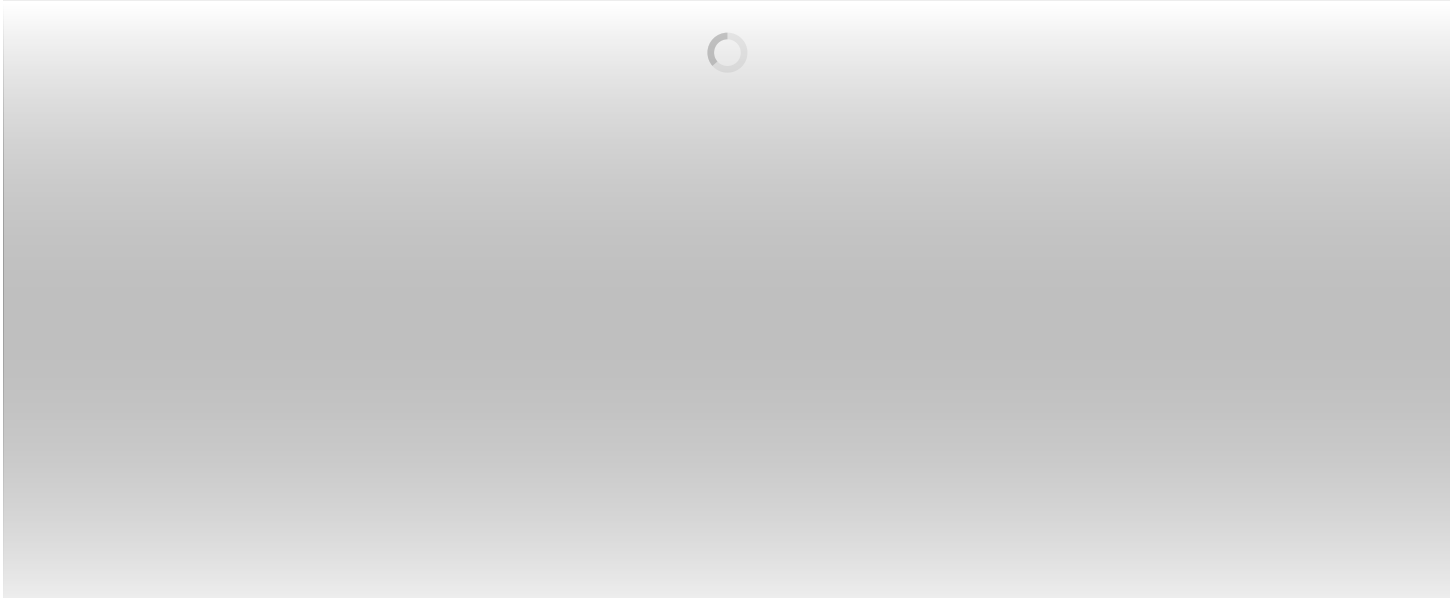
▸ Drugs and Lactation Database (LactMed)

12.1.2 Acute Effects

▸ ChemIDplus

13 Literature

13.1 Consolidated References



PubChem

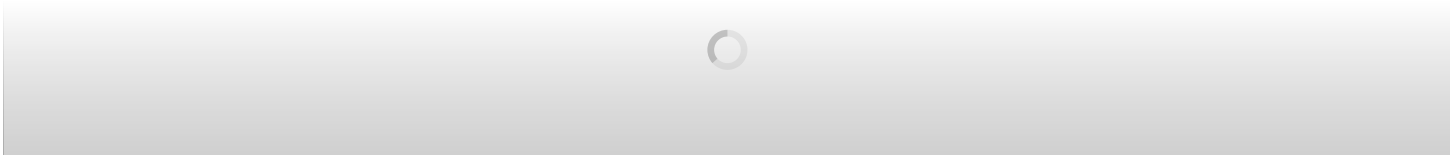
13.2 NLM Curated PubMed Citations

PubChem

13.3 Springer Nature References

Springer Nature

13.4 Chemical Co-Occurrences in Literature



PubChem

13.5 Chemical-Gene Co-Occurrences in Literature

PubChem

13.6 Chemical-Disease Co-Occurrences in Literature

PubChem

14 Patents

14.1 Depositor-Supplied Patent Identifiers

PubChem

Link to all deposited patent identifiers

PubChem

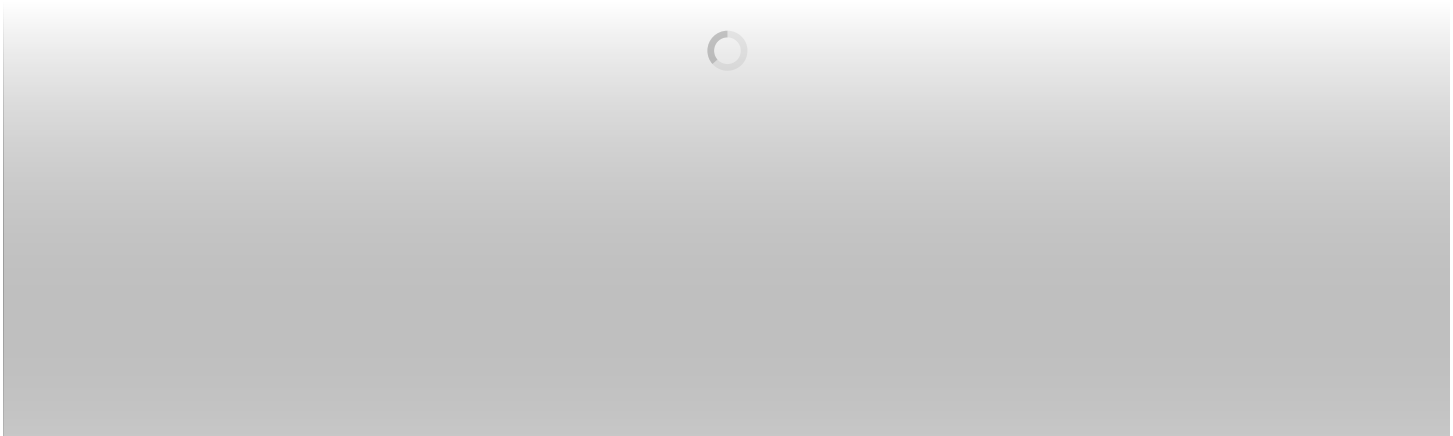
14.2 WIPO PATENTSCOPE

Patents are available for this chemical structure:

https://patentscope.wipo.int/search/en/result.jsf?inchikey=IYBQHJMYDGVZRY-UHFFFAOYSA-N

PATENTSCOPE (WIPO)

14.3 FDA Orange Book Patents



FDA Orange Book

14.4 Chemical Co-Occurrences in Patents

PubChem

14.5 Chemical-Disease Co-Occurrences in Patents

PubChem

14.6 Chemical-Gene Co-Occurrences in Patents

PubChem

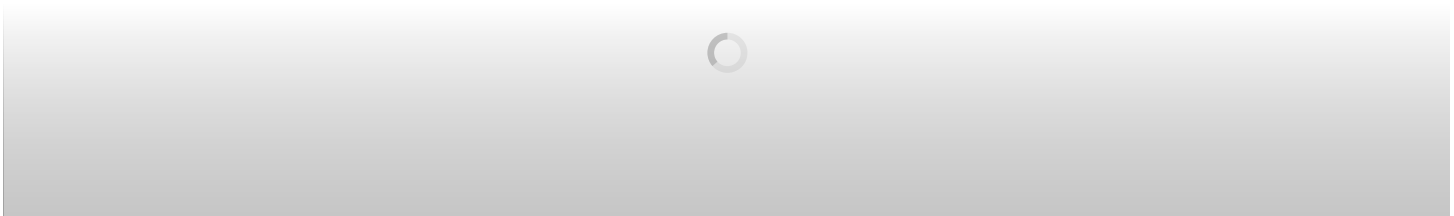
15 Biological Test Results

15.1 BioAssay Results

PubChem

16 Classification

16.1 MeSH Tree

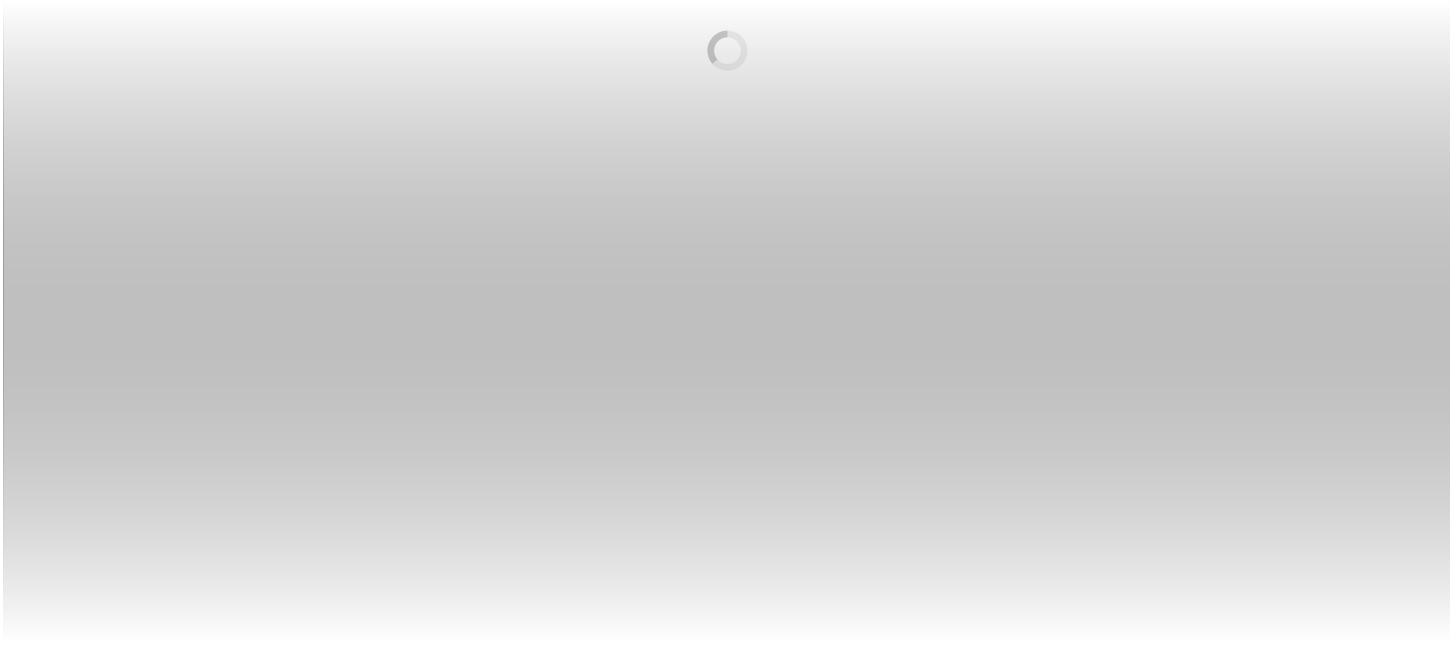


▸ Medical Subject Headings (MeSH)

16.2 NCI Thesaurus Tree

▸ NCI Thesaurus (NCIt)

16.3 KEGG: Drug

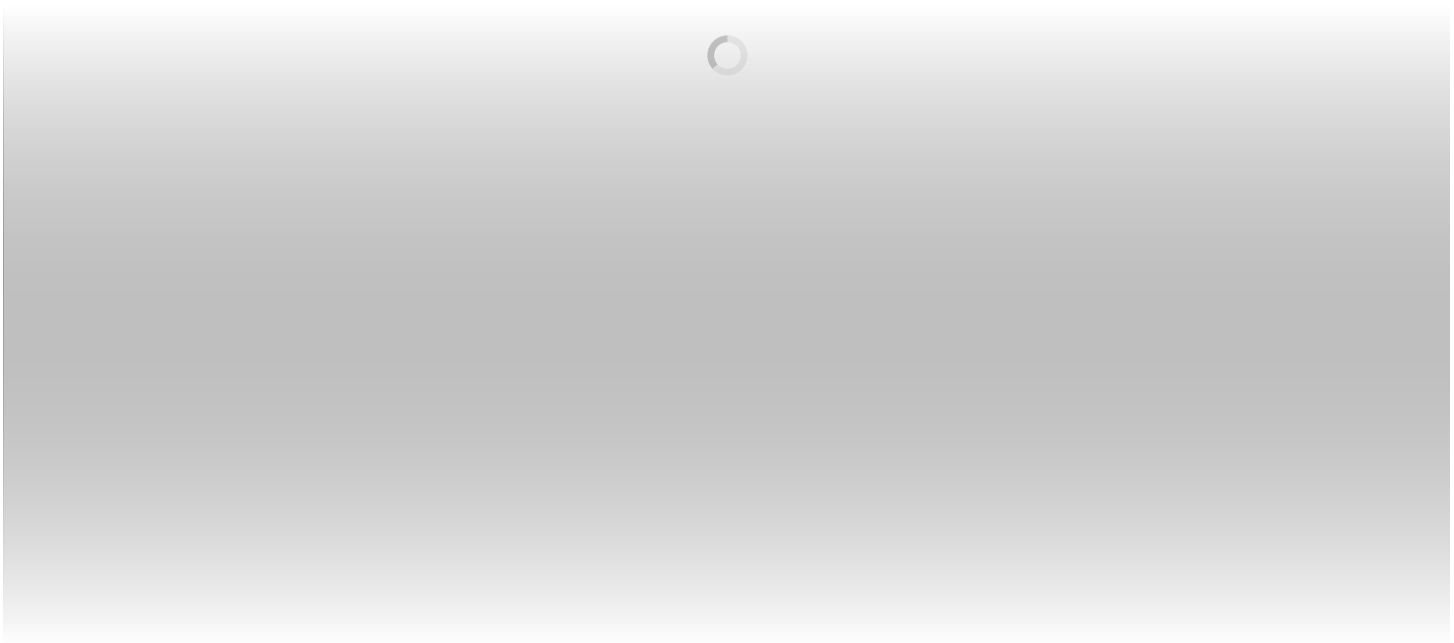


KEGG

16.4 KEGG: USP

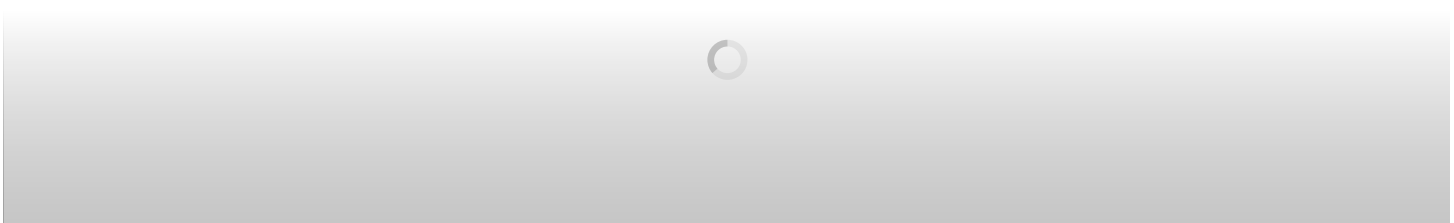
KEGG

16.5 KEGG: ATC



KEGG

16.6 KEGG: Target-based Classification of Drugs



KEGG

16.7 KEGG: Risk Category of Japanese OTC Drugs

KEGG

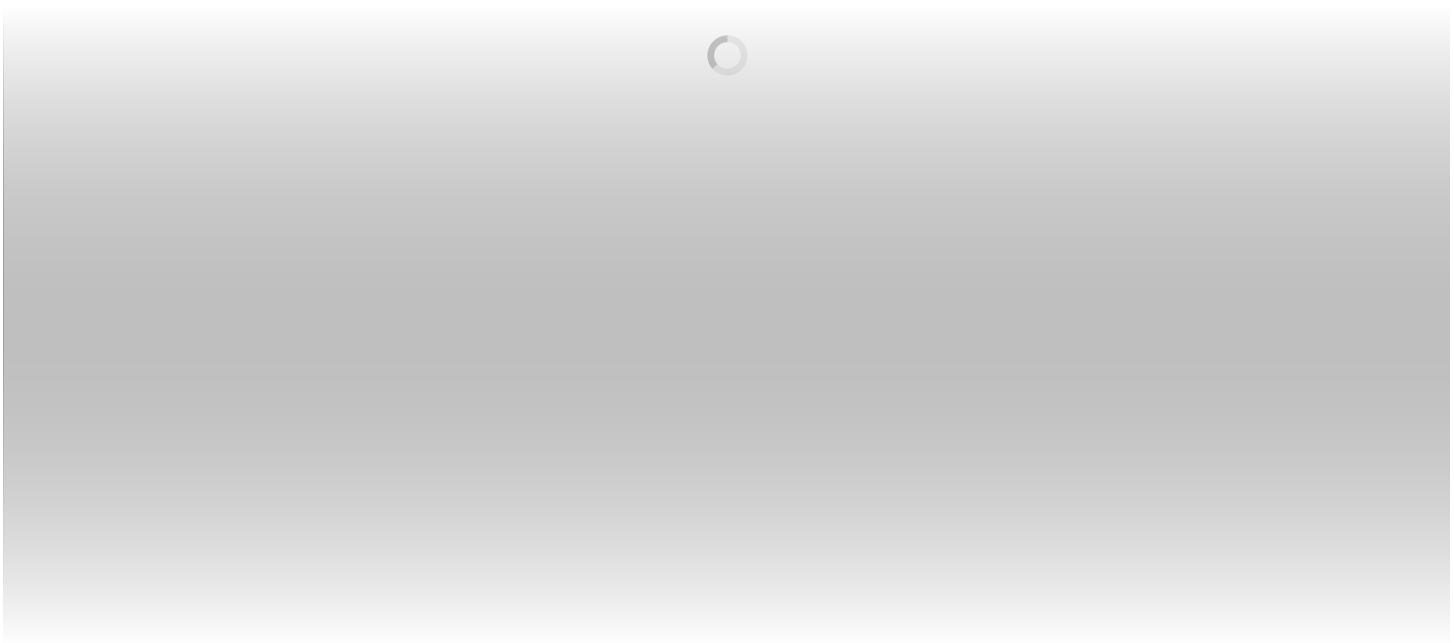
16.8 KEGG: OTC drugs

KEGG

16.9 KEGG: Drug Groups

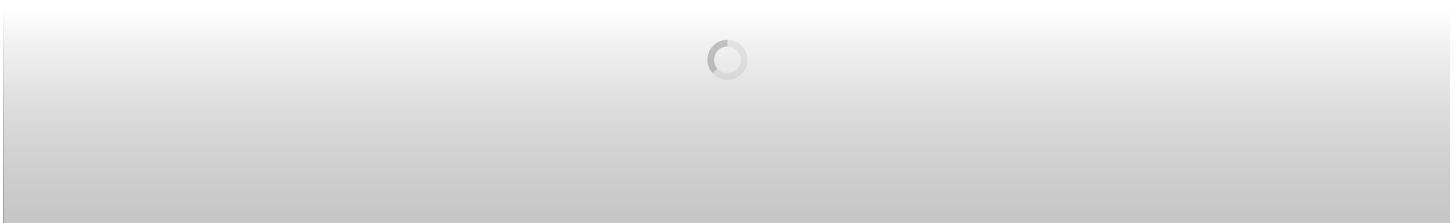
KEGG

16.10 KEGG: Drug Classes



KEGG

16.11 ChemIDplus



ChemIDplus

16.12 ChEMBL Target Tree

ChEMBL

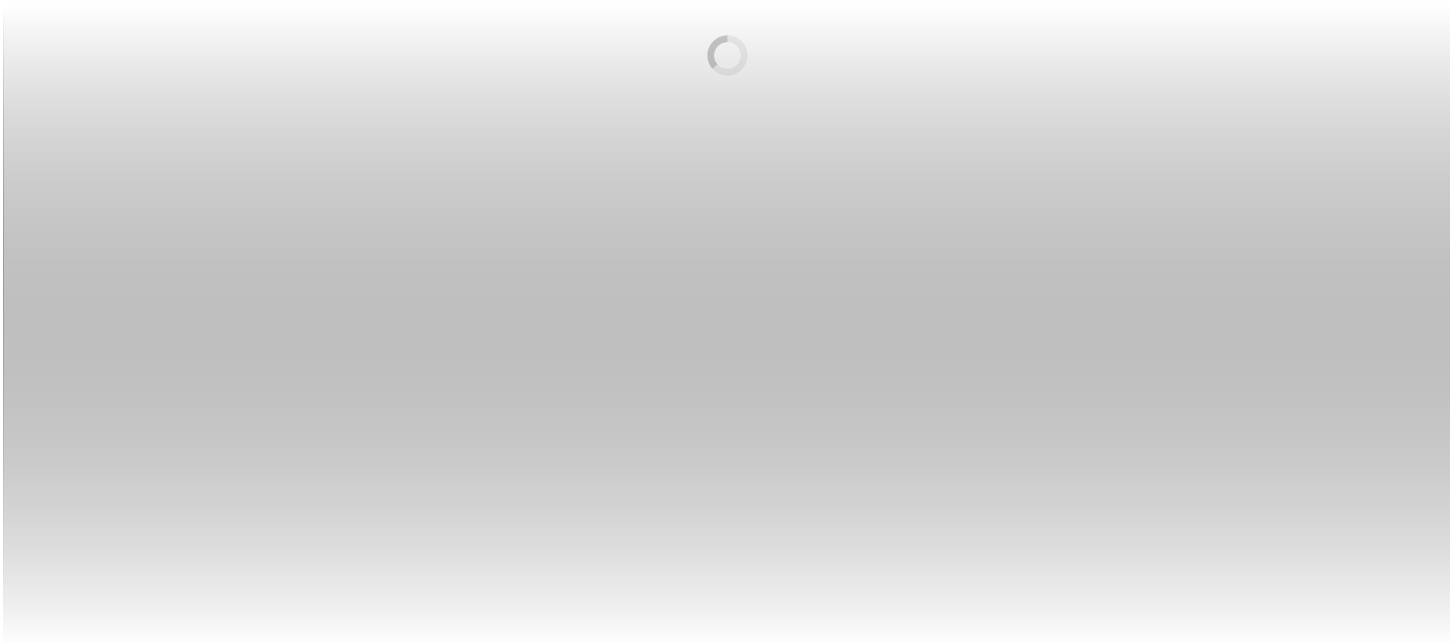
16.13 UN GHS Classification

GHS Classification (UNECE)

16.14 EPA CPDat Classification

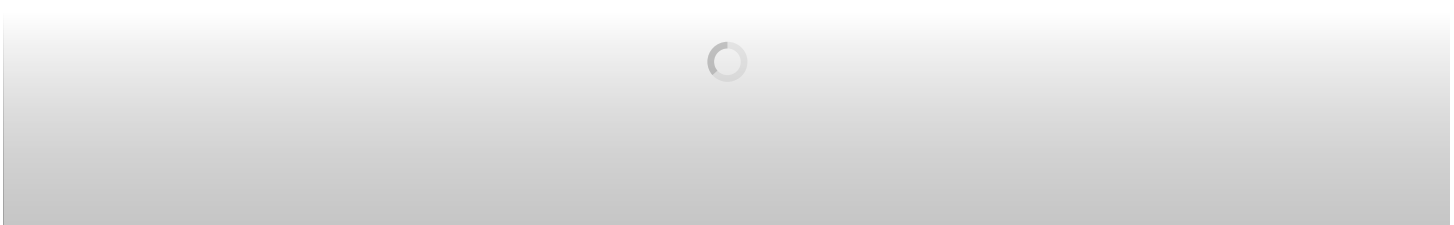
EPA Chemical and Products Database (CPDat)

16.15 NORMAN Suspect List Exchange Classification



NORMAN Suspect List Exchange

16.16 CCSBase Classification



CCSbase

16.17 EPA DSSTox Classification

EPA DSSTox

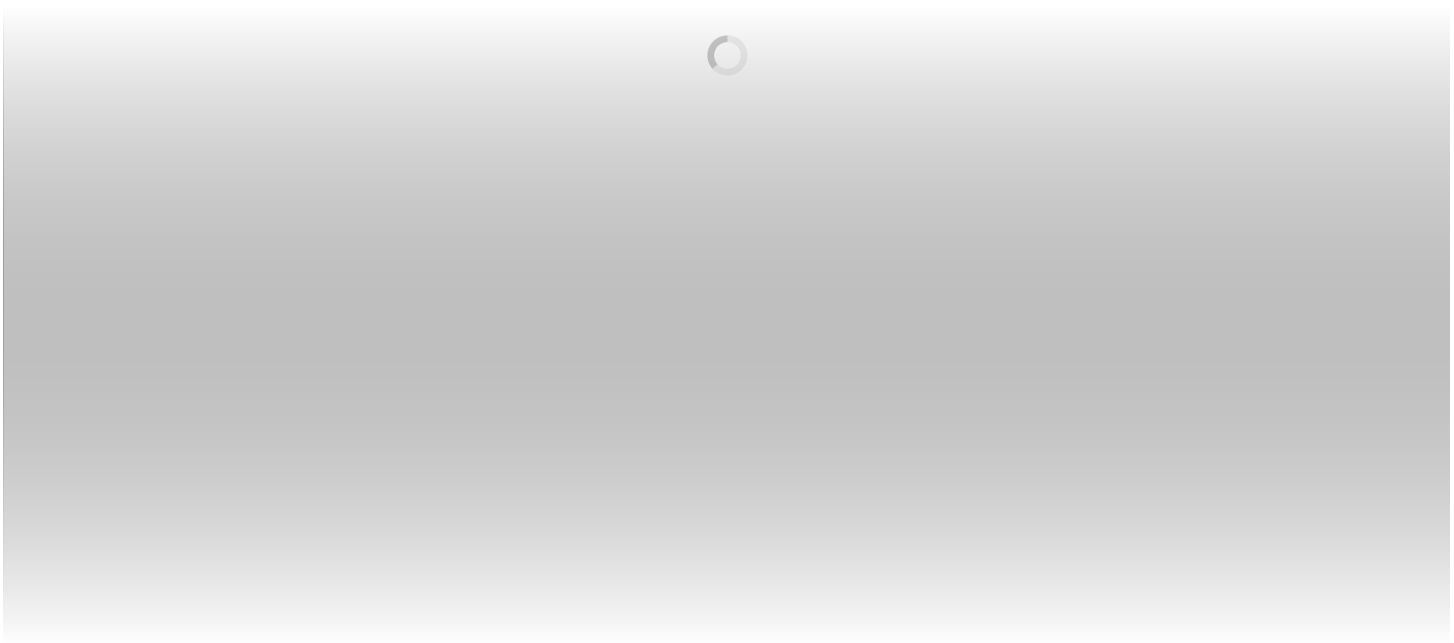
16.18 Consumer Product Information Database Classification

- Consumer Product Information Database (CPID)

16.19 EPA TSCA and CDR Classification

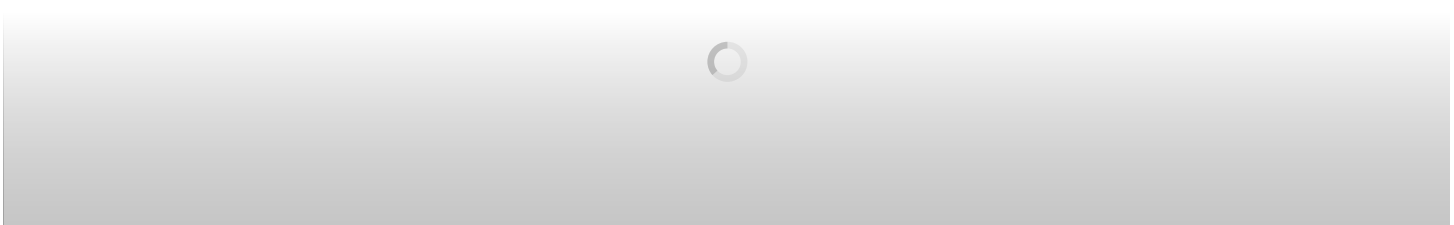
- EPA Chemicals under the TSCA

16.20 FDA Drug Type and Pharmacologic Classification



- National Drug Code (NDC) Directory

16.21 EPA Substance Registry Services Tree



EPA Substance Registry Services

17 Information Sources

FILTER BY SOURCE

ALL SOURCES

1. ### Australian Industrial Chemicals Introduction Scheme (AICIS)

Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, monohydrochloride

https://services.industrialchemicals.gov.au/search-assessments/

2. ### CAS Common Chemistry

Lidocaine hydrochloride

https://commonchemistry.cas.org/detail?cas_rn=73-78-9

3. ### ChemIDplus

Lidocaine hydrochloride

https://pubchem.ncbi.nlm.nih.gov/substance/?source=chemidplus&sourceid=0000073789

ChemIDplus Chemical Information Classification

https://pubchem.ncbi.nlm.nih.gov/source/ChemIDplus

4. ### DTP/NCI

Lidocaine hydrochloride

https://dtp.cancer.gov/dtpstandard/servlet/dwindex?searchtype=NSC&outputformat=html&searchlist=757420

5. ### EPA Chemical Data Reporting (CDR)

Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, hydrochloride (1:1)
https://www.epa.gov/chemical-data-reporting

6. EPA Chemicals under the TSCA

Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, hydrochloride (1:1)
https://www.epa.gov/chemicals-under-tsca

EPA TSCA Classification
https://www.epa.gov/tsca-inventory

7. EPA DSSTox

Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)-, monohydrochloride
https://comptox.epa.gov/dashboard/DTXSID4058782

CompTox Chemicals Dashboard Chemical Lists
https://comptox.epa.gov/dashboard/chemical-lists/

8. European Chemicals Agency (ECHA)

Lidocaine hydrochloride
https://echa.europa.eu/substance-information/-/substanceinfo/100.000.731

Lidocaine hydrochloride
https://echa.europa.eu/substance-information/-/substanceinfo/100.130.870

Lidocaine hydrochloride (EC: 200-803-8)
https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/92016

Lidocaine hydrochloride (EC: 612-079-4)
https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/121871

9. FDA Global Substance Registration System (GSRS)

LIDOCAINE HYDROCHLORIDE ANHYDROUS
https://gsrs.ncats.nih.gov/ginas/app/beta/substances/EC2CNF7XFP

10. New Zealand Environmental Protection Authority (EPA)

Lidocaine hydrochloride

https://www.epa.govt.nz/industry-areas/hazardous-substances/guidance-for-importers-and-manufacturers/hazardous-substances-databases/

11. CCSbase

CCSbase Classification

https://ccsbase.net/

12. ChEMBL

https://www.ebi.ac.uk/chembl/compound_report_card/CHEMBL541521/

ChEMBL Protein Target Tree

https://www.ebi.ac.uk/chembl/g/#browse/targets

13. ClinicalTrials.gov

https://clinicaltrials.gov/

14. Consumer Product Information Database (CPID)

Lidocaine hydrochloride

https://www.whatsinproducts.com/chemicals/view/1/5034/000073-78-9

Consumer Products Category Classification

https://www.whatsinproducts.com/

15. DailyMed

LIDOCAINE HYDROCHLORIDE

https://dailymed.nlm.nih.gov/dailymed/search.cfm?labeltype=all&query=LIDOCAINE+HYDROCHLORIDE

16. Drugs and Lactation Database (LactMed)

https://www.nlm.nih.gov/copyright.html

Lidocaine

https://www.ncbi.nlm.nih.gov/books/n/lactmed/LM363/

17. Drugs@FDA

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https://www.accessdata.fda.gov/scripts/cder/daf/

18. EPA Chemical and Products Database (CPDat)

LICENSE
https://www.epa.gov/privacy/privacy-act-laws-policies-and-resources

https://comptox.epa.gov/dashboard/DTXSID4058782#exposure

EPA CPDat Classification

https://www.epa.gov/chemical-research/chemical-and-products-database-cpdat

19. EU Clinical Trials Register

https://www.clinicaltrialsregister.eu/

20. FDA Orange Book

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LIDOCAINE HYDROCHLORIDE

https://www.fda.gov/drugs/drug-approvals-and-databases/approved-drug-products-therapeutic-equivalence-evaluations-orange-book

21. KEGG

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https://www.kegg.jp/kegg/legal.html

https://www.kegg.jp/entry/D02086

Therapeutic category of drugs in Japan

http://www.genome.jp/kegg-bin/get_htext?br08301.keg

USP drug classification

http://www.genome.jp/kegg-bin/get_htext?br08302.keg

Anatomical Therapeutic Chemical (ATC) classification

http://www.genome.jp/kegg-bin/get_htext?br08303.keg

Target-based classification of drugs

http://www.genome.jp/kegg-bin/get_htext?br08310.keg

Risk category of Japanese OTC drugs

http://www.genome.jp/kegg-bin/get_htext?br08312.keg

Classification of Japanese OTC drugs

http://www.genome.jp/kegg-bin/get_htext?br08313.keg

Drug Groups

http://www.genome.jp/kegg-bin/get_htext?br08330.keg

Drug Classes

http://www.genome.jp/kegg-bin/get_htext?br08332.keg

22. National Drug Code (NDC) Directory

LIDOCAINE HYDROCHLORIDE

https://www.fda.gov/drugs/drug-approvals-and-databases/national-drug-code-directory

23. NCI Thesaurus (NCIt)

https://ncithesaurus.nci.nih.gov/ncitbrowser/ConceptReport.jsp?dictionary=NCI_Thesaurus&ns=ncit&code=C48000

https://ncithesaurus.nci.nih.gov/ncitbrowser/ConceptReport.jsp?dictionary=NCI_Thesaurus&ns=ncit&code=C90650

NCI Thesaurus

https://ncit.nci.nih.gov

24. NIPH Clinical Trials Search of Japan

https://rctportal.niph.go.jp/en/

25. NLM RxNorm Terminology

lidocaine hydrochloride

https://rxnav.nlm.nih.gov/id/rxnorm/142440

lidocaine hydrochloride anhydrous

https://rxnav.nlm.nih.gov/id/rxnorm/1299236

26. SpectraBase

2-(DIETHYLAMINO)-2',6'-ACETOXYLIDIDE, MONOHYDROCHLORIDE

https://spectrabase.com/spectrum/MgecH6TZmH

2-(diethylamino)-2',6'-acetoxylidide, monohydrochloride

https://spectrabase.com/spectrum/BljhLAKocMg

2-(DIETHYLAMINO)-2',6'-ACETOXYLIDIDE, MONOHYDROCHLORIDE

https://spectrabase.com/spectrum/FjOWIo9miLe

ACETAMIDE, 2-(DIETHYLAMINO)-N-(2,6-DIMETHYLPHENYL)-, MONOHYDROCHLORIDE

https://spectrabase.com/spectrum/2TGLIm86sev

27. Springer Nature

https://pubchem.ncbi.nlm.nih.gov/substance/?source=15745&sourceid=18045412-813587603

28. Wikidata

lidocaine hydrochloride

https://www.wikidata.org/wiki/Q27122094

29. Medical Subject Headings (MeSH)

Lidocaine

https://www.ncbi.nlm.nih.gov/mesh/68008012

MeSH Tree

http://www.nlm.nih.gov/mesh/meshhome.html

Voltage-Gated Sodium Channel Blockers

https://www.ncbi.nlm.nih.gov/mesh/68061567

Anti-Arrhythmia Agents

https://www.ncbi.nlm.nih.gov/mesh/68000889

Anesthetics, Local

https://www.ncbi.nlm.nih.gov/mesh/68000779

30. PubChem

https://pubchem.ncbi.nlm.nih.gov

31. GHS Classification (UNECE)

GHS Classification Tree

http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html

32. NORMAN Suspect List Exchange

NORMAN Suspect List Exchange Classification

https://www.norman-network.com/nds/SLE/

33. EPA Substance Registry Services

EPA SRS List Classification

https://sor.epa.gov/sor_internet/registry/substreg/LandingPage.do

34. PATENTSCOPE (WIPO)

SID 403383332

https://pubchem.ncbi.nlm.nih.gov/substance/403383332