Principal Investigators are responsible for informing all research and animal staff of any potential hazards involved with the substances they work with or may potentially be exposed to before any work with the substance begins. They must conduct a hazard assessment and complete the IACUC Appendix G form.

The following tables are prepared to provide information on what chemicals have been historically reviewed. These are a compilation of previously submitted chemicals for IACUC’s Appendix G EHS reviews. PIs can review the tables to determine whether the chemicals planned for use have been previously reviewed for hazards.

|  |  |  |
| --- | --- | --- |
| **Table 1, Hazardous Chemicals**   * List in your **Appendix G (newest version on IACUC site) in Section 4: Hazardous Substances**. * Table 1 provides the OSHA hazard classifications of associated health and physical hazards and any special precautions associated with the chemical. | **Table 2, Non-Hazardous Chemicals**   * L**ist in your Appendix G (newest version on IACUC site) in Section II**. | **Table 3, Pharmaceuticals**   * Pharmaceuticals (hazardous or non-hazardous), as identified by the University Veterinarian, **should be included in the Pharmaceutical section in Appendix G.** |

When it is unknown whether a chemical is hazardous (e.g., proprietary or novel formulations), it must be presumed it is hazardous and included in Section IV.

Chemicals which have been approved by the Federal Drug Agency (FDA) as Generally Recognized as Safe (GRAS) should be included in Table 2, Non-Hazardous Chemicals.

**Note:** Personal health status may increase the risks involved with the potential exposure to chemicals or other hazards. All personnel who maybe immunocompromised, maybe pregnant, are thinking of getting pregnant, or have other health related issues should consult with their physician, VT Occupational physician or nurse for information on how to protect themselves from potential exposure to hazardous chemical(s) and any other hazards.

**TABLE 1. Hazardous Chemicals (unless otherwise specified, chemicals listed in concentrated form)**

|  |  |  |
| --- | --- | --- |
| **Chemical / Chemical Product** | **Hazard(s) and Category**  **(**Category 1 is more severe than Category 4.) | **Comments** |
| 1,14-bis(3,5-dimethoxyphenyl)tetradecane | * TBD |  |
| [1,4-dihydroxy-2-napthoic acid (DHNA)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=281255&brand=ALDRICH&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Faldrich%2F281255%3Flang%3Den) | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3) * Respiratory system |  |
| 2,4,6-Tris(tert-butyl)phenol | * Acute toxicity, Oral (Category 4) * Acute aquatic toxicity (Category 1) |  |
| 5-aza-2-deoxycytidine | * Acute toxicity, Oral (Category 4) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Germ cell mutagenicity (Category 2) * Reproductive toxicity (Category 1B) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| [A,A’-Dipyridyl (2,2’-Bipyridyl)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=D216305&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsial%2Fd216305%3Flang%3Den) | * Acute toxicity, Oral (Category 3) * Acute toxicity, Dermal (Category 3) |  |
| [Acyclovir](https://www.caymanchem.com/msdss/14160m.pdf) | * Skin Corrosion/Irritation (Category 2) * Serious Eye Damage/Eye Irritation (Category 2) * Specific Target Organ Toxicity (single exposure) (Category 3) |  |
| Acrylic Paint |  |  |
| Alkyl dimethyl benzyl ammonium chloride | * Acute Toxicity – Category 4 (oral) * Flammable liquid – Category 3 |  |
| Alpha-bungarotoxin | * Acute oral toxicity (Category 4) * Acute dermal toxicity (Category 3) * Acute inhalation toxicity – dusts and mists (Category 4) | Not excreted. Alpha-bungarotoxin is derived from the venom of the elapid snake, Taiwanese banded krait. It is a neurotoxic protein that binds to nicotinic acetylcholine receptors at the neuromuscular junction irreversibly. This toxin causes paralysis, respiratory failure and death of victims bitten by the snake. However, this toxin is widely and routinely used as the central tool for studying the neuromuscular junction and the specific functions of nicotinic acetylcholine receptors. |
| [Ampicillin](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=10835269001&brand=ROCHE&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Froche%2Froamp%3Flang%3Den%26region%3DUS) | * Respiratory sensitization, Category 1 * Skin sensitization, Category 1 |  |
| Anilazine | * Skin irritation (Category 2) * Serious eye damage (Category 1) * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| [Atropine](https://www.caymanchem.com/msdss/12008m.pdf) | * Acute Toxicity, Inhalation (Category 2) * Acute Toxicity, Oral (Category 2) |  |
| Azoxymethane | * Flammable liquids (Category 3) * Corrosive to metals (Category 1) * Acute toxicity, Oral (Category 2) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Carcinogenicity (Category 1B) |  |
| Barium Chloride (BaCl2) | * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 4) * Eye irritation (Category 2A) |  |
| [Betadine scrub (Povidone/iodine)](https://www.medline.com/media/catalog/Docs/MSDS/MSD_SDS0139.pdf) | * Acute Toxicity - Inhalation - Category 5 * Acute Toxicity - Oral - Category 5 EYE DAMAGE/IRRITATION - Category 2B |  |
| Benzocaine | * Acute aquatic toxicity (Category 2) * Chronic aquatic toxicity (Category 2) |  |
| Bisphenol A | * Serious eye damage (Category 1) * Skin sensitisation (Category 1) * Reproductive toxicity (Category 2) * Specific target organ toxicity - single exposure (Category 3) Respiratory system * Acute aquatic toxicity (Category 2) * Chronic aquatic toxicity (Category 2) |  |
| Botulinum toxin A - G | * Neurotoxin |  |
| Bromodeoxyuridine (BrdU) | * Germ cell mutagenicity (Category 1B), Reproductive toxicity (Category 2) * Toxic, teratogen and mutagen | **BrdU** is a synthetic chemical commonly used to study proliferating cells. BrdU binds to DNA, and thus is associated with significant health and safety risks. It is a cytotoxic, teratogenic and mutagenic substance. |
| [Butanol](https://www.fishersci.com/store/msds?partNumber=A4004&productDescription=1-BUTANOL+SPECTRANALYZE+CR+4L&vendorId=VN00033897&countryCode=US&language=en) | * Flammable Liquids (Category 3) * Acute Oral Toxicity (Category 4) * Skin Corrosion/Irritation (Category 2) * Serious Eye Damage/Eye Irritation (Category 1) * Specific Target Organ Toxicity, Single Exposure (Category 3) * Target Organs: Respiratory system, Central Nervous System (CNS) |  |
| [Butorphanol Tartrate (Injection)](https://www.zoetisus.com/contact/pages/product_information/msds_pi/msds/torbugesic-sa.pdf) | * Acute Toxicity, Dermal (Category 3) * Serious Eye Damage/Eye Irritation (Category 2A) * Reproductive Toxicity (Category 1B) * Reproductive Toxicity: effects on or via lactation |  |
| [Butoxamine hydrochloride](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=B1385&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3D5696-15-1%26interface%3DCAS%2520No.%26N%3D0%2B%26mode%3Dpartialmax%26lang%3Den%26region%3DUS%26focus%3Dproduct) | * Acute Toxicity, oral (Category 4) * Eye Irritation (Category 2A) |  |
| [Capsaicin](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=M2028&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fm2028%3Flang%3Den) | * Acute toxicity, Oral (Category 3) * Skin irritation (Category 2) * Serious eye damage (Category 1) Respiratory sensitisation (Category 1) * Skin sensitisation (Category 1) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| Carboplatin | * Acute toxicity, Oral (Category 4) * Acute toxicity, Inhalation (Category 4) * Acute toxicity, Dermal (Category 4) * Respiratory sensitization (Category 1) * Skin sensitization (Category 1), * Germ cell mutagenicity (Category 1B) * Reproductive toxicity (Category 1B) |  |
| CCNU (lomustine) | * Acute toxicity, Oral (Category 3) * Carcinogenicity (Category 1B) |  |
| Cadmium chloride (CdCl2) | * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 2) * H330 Germ cell mutagenicity (Category 1B) * Carcinogenicity (Category 1B) * Reproductive toxicity (Category 1B) * Specific target organ toxicity - repeated exposure (Category 1) * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| [Calcitriol (or 1,25-dihydroxyvitamin D3)](https://www.caymanchem.com/msdss/71820m.pdf) | * Acute Toxicity: Oral, Category 1 * Acute Toxicity: Skin, Category 1 * Toxic To Reproduction, Category 2 |  |
| [Carbocaine (mepivicaine)](https://www.caymanchem.com/msdss/23402m.pdf) | * Acute Toxicity: Oral, Category 3 |  |
| [Ceftiofur sodium](http://www.cvear.com/wp-content/uploads/2012/06/Naxcel-SDS.pdf) | * Skin Corrosion/Irritation: Category 2 * Serious Eye Damage/Eye Irritation:   Category 2A   * Respiratory Sensitization: Category 1 * Skin Sensitization: Category 1 |  |
| [Chlorhexidine](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=282227&brand=ALDRICH&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Faldrich%2F282227%3Flang%3Den) | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Respiratory sensitisation (Category 1) * Specific target organ toxicity - single exposure (Category 3), Respiratory system * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| Chlorothalonil | * Acute toxicity, Inhalation (Category 2) * Serious eye damage (Category 1) * Skin sensitisation (Category 1) * Carcinogenicity (Category 2) * Specific target organ toxicity - single exposure (Category 3), Respiratory system * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| Chlorpyrifos | * Acute toxicity, Oral (Category 3) * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| Cholera toxin, from *Vibrio cholera:*  subunit A+B, or  subunit A | * Acute toxicity, Oral (Category 2) * Acute toxicity, Dermal (Category 2) * Acute aquatic toxicity (Category 3) * Chronic aquatic toxicity (Category 3) | **Cholera Toxin subunit B** is the inactive fragment of Cholera toxin. While it allows the toxin to enter the cell, it does not cause cellular changes that result in diarrhea. However, this subunit may have mutagenic and teratogenic properties. This toxin is widely used to label neurons and their projecting axons. |
| [Cinnemaldehyde](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=W228613&brand=ALDRICH&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Faldrich%2Fw228613%3Flang%3Den) | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Skin sensitisation (Category 1) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| Clenbuterol | * Acute toxicity, Oral (Category 3) |  |
| [Clozapine nitric oxide](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=C0832&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fc0832%3Flang%3Den) | * Acute toxicity, Oral (Category 3) * Specific target organ toxicity - single exposure (Category 3), Central nervous system |  |
| Ciprofloxacin | * Varying information on this. Request to see specific SDS from PI. |  |
| Coban Premix  (Coban 90 [molensin]) | * Acute toxicity, oral (Category 4) * Serious eye damage/eye irritation (Category 1) * Sensitization, respiratory (Category 1) * Specific target organ toxicity, repeated exposure (Category 2) |  |
| [Colistin](https://www.caymanchem.com/msdss/17584m.pdf) | * Acute Toxicity: Oral, Category 3 |  |
| [Clindamycin](https://www.zoetisus.com/contact/pages/product_information/msds_pi/msds/antirobe_capsules_75_150-300mg.pdf) | * Serious Eye Damage/Eye Irritation, Category 2 * Sensitization, skin Category 1 |  |
| [Cyclophosphamide](https://www.pfizer.com/sites/default/files/products/material_safety_data/PZ00021.pdf) | * Toxic to reproduction: Category 1 * Carcinogenic: Category 1 * Mutagenic: Category 1 |  |
| Cystorelin, 50 mcg gonadorelin/mL (GnRH) | * Acute toxicity (Category 4) |  |
| Dexamethasone | * Reproductive toxicity (Category 1B) |  |
| Diaryl prionitrile | * Eye Irritant (Category 2) |  |
| [6-Diazo-5-oxo-L-norleucine](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=D2141&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fd2141%3Flang%3Den) | * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) |  |
| Diazepam | * Acute toxicity, oral (Category 3) * Acute toxicity, dermal (Category 3) |  |
| Diclorofenac (ophthalmic solution 0.1%) | * Skin irritation (Category 3) * Eye irritation (Category 2B) * Specific target organ toxicity – single exposure (respiratory tract irritation) (Category 3) * Reproductive toxicity (Category 2) |  |
| Dimethyl sulfoxide (100%) | * Flammable liquid, Category 4 | As a diluent at dilute concentrations, likely may not carry this hazard. |
| Docosahexaenoic Acid | * Flammable liquid (Category 4) |  |
| [Doxapram](https://www.caymanchem.com/msdss/23794m.pdf) (hydrochloride hydrate) | * Acute Toxicity, Oral (Category 3) |  |
| Doxorubicin | * Acute toxicity, Oral (Category 4) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Carcinogenicity (Category 1B) |  |
| [Enrofloxacin (Baytril)](https://www.caymanchem.com/msdss/20301m.pdf) | * Acute Toxicity: Oral (Category 4) * Respiratory Sensitization (Category 1) * Skin Sensitization (Category 1) |  |
| Ethanol | * Flammable liquids (Category 2) * Eye irritation (Category 2A) |  |
| [Etomoxir](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=E1905&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3Detomoxir%26interface%3DAll%26N%3D0%26mode%3Dpartialmax%26lang%3Den%26region%3DUS%26focus%3Dproduct) | * Acute toxicity, Oral (Category 3) |  |
| Evan's blue dye | * Carcinogenicity (Category 1B) |  |
| [Flumazenil](https://www.caymanchem.com/msdss/14252m.pdf) | * Acute Toxicity, Inhalation (Category 4) * Acute Toxicity, Oral (Category 4) |  |
| Fluorescein Isothiocyanate (FITC)-Dextran (3,000-70,000 MW) | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| Formaldehyde | * Flammable liquids (Category 4) * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) * Skin corrosion (Category 1B) * Serious eye damage (Category 1) * Skin sensitisation (Category 1) * Germ cell mutagenicity (Category 2) * Carcinogenicity (Category 1A) * Specific target organ toxicity - single exposure (Category 1) * Acute aquatic toxicity (Category 3) |  |
| [Formalin (Buffered,10%)](https://www.fishersci.com/shop/msdsproxy?storeId=10652&productName=SF10020) | * Flammable Liquids (Category 4) * Skin Corrosion/Irritation (Category 2) * Serious Eye DamageEye /Irritation (Category 1) * Skin Sensitization (Category 1) * Germ Cell Mutagenicity (Category 2) * Carcinogenicity (Category 1A) * Specific Target Organ Toxicity (Category 1) * Target Organs: Respiratory System, Central Nervous System (CNS) |  |
| [Gabapentin](https://www.caymanchem.com/msdss/10008346m.pdf) | * Skin Corrosion/Irritation (Category 2) * Serious Eye Damage/Eye Irritation (Category 2) * Toxic to Reproduction (Category 1B) * Specific Target Organ Toxicity, Single Exposure (Category 3) |  |
| Gemcitabine | * Reproductive toxicity (Category 1B) |  |
| Gentamicin | * Skin sensitisation (Category 1) |  |
| GnRH | * Reproductive toxicity (Category 1B) |  |
| [des-Gly10, D-Ala6, Pro-LHRH (Bachem H4070.0005) - Gonadotropin released hormone](http://msds.bachem.com/4012028.pdf) | * Reproductive toxicity (Category 1A) |  |
| Hispidulin | * Acute toxicity, Oral (Category 4) |  |
| Hydroxyurea | * Germ cell mutagenicity (Category 1B) * Reproductive toxicity (Category 2) |  |
| Human chorionic gonadotropin (HCG) | * Reproductive toxicity (Category 2) |  |
| [Ichthammol Ointment](https://jmloveridge.com/wp-content/uploads/2018/06/Ichthammol-Version-05.pdf) | * Causes serious eye irritation (Category 2) * Harmful to aquatic life with long lasting effects (Category 3) |  |
| [Imatinib](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=CDS022173&brand=ALDRICH&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Finterface%3DAll%26term%3Dimatinib%26N%3D0%26focus%3Dproduct%26lang%3Den%26region%3DUS) | * Acute toxicity, Oral (Category 4) |  |
| Imiquimod (R837, adjuvant) | * Acute toxicity, oral (Category 2) * Skin Corrosion/Irritation (Category 2) * Serious Eye Damage/Eye Irritation (Category 2A) * Target organ systemic toxicity, single exposure (Category 3) |  |
| [Iron Dextran w/](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=D8517&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fd8517%3Flang%3Den)  [0.1 – 1 % phenol](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=D8517&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fd8517%3Flang%3Den) | * Skin sensitisation (Category 1) * Carcinogenicity (Category 1B) |  |
| [Kanamycin](https://www.caymanchem.com/msdss/15321m.pdf) | * Toxic To Reproduction, Category 1B |  |
| Letrazole | * Reproductive toxicity (Category 1A) |  |
| [Levamisole (hydrochloride)](https://www.caymanchem.com/msdss/14874m.pdf) | * Acute Toxicity, Oral (Category 3) |  |
| [Liraglutide](https://www.novonordiskmedical.com/content/dam/medical/novonordiskmedical/safety-data-sheets/Victoza%20SDS.pdf) | * Acute toxicity (Category 4) * Respiratory Sensitiser (Category 1) * Skin Sensitiser (Category 1) * Carcinogen (Category 2) |  |
| Lithium | * Substances and mixtures, which in contact with water, emit flammable gases (Category 1) * Skin corrosion (Category 1B) * Serious eye damage (Category 1) |  |
| [Lutalyse, 5 mg dinoprost/mL (Prostaglandin)](https://www.zoetisus.com/contact/pages/product_information/msds_pi/msds/lutalyse_highcon_injection.pdf) | * Reproductive toxicity (Category 1B) |  |
| [Lysergic acid diethylamide](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=L-005&brand=CERILLIAN&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3DLSD%26interface%3DAll%26N%3D0%26mode%3Dmatch%2520partialmax%26lang%3Den%26region%3DUS%26focus%3Dproduct) | * Flammable liquids (Category 2) * Acute toxicity, Oral (Category 4) * Acute toxicity, Inhalation (Category 4) * Acute toxicity, Dermal (Category 4) * Eye irritation (Category 2A) |  |
| Maltol | * Acute toxicity, Oral (Category 4) |  |
| [Maropitant citrate (injectable)](https://www.zoetisus.com/contact/pages/product_information/msds_pi/msds/cerenia_injectable.pdf) | * Serious eye damage/eye irritation (Category 2A) * Sensitization, skin (Category 1) * Specific target organ toxicity, repeated exposure (Category 2, cardiovascular system, liver) * Hazardous to the aquatic environment, acute hazard (Category 3) * Hazardous to the aquatic environment long-term hazard (Category 3) |  |
| [3,4-methylenedioxymethamphetamine (MDMA)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=M6403&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3D3%252C4-methylenedioxymethamphetamine%26interface%3DAll%26N%3D0%26mode%3Dmatch%2520partialmax%26lang%3Den%26region%3DUS%26focus%3Dproduct) | * Acute toxicity, Oral (Category 3) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| [Metformin](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=PHR1084&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Finterface%3DAll_ZH%26term%3Dmetformin%26N%3D0%26mode%3Dpartialmax%26focus%3Dproduct%26lang%3Den%26region%3DUS) | * Acute toxicity, Category 4, Oral |  |
| [Methylatropine bromide (powder)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=A6883&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fa6883%3Flang%3Den) | * Acute toxicity, Oral (Category 4) |  |
| [Metoclopramide](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=32473&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3DMetoclopramide%26interface%3DProduct%2520Name%26N%3D0%2B%26mode%3Dmode%2520matchpartialmax%26lang%3Den%26region%3DUS%26focus%3DproductN%3D0%2520220003048%2520219853286%2520219853269) | * Acute toxicity, Oral (Category 4) * Effects on or via lactation |  |
| [Metronidazole](https://www.caymanchem.com/msdss/9002409m.pdf) | * Germ Cell Mutagenicity, Category 2 * Carcinogenicity, Category 1B * Specific Target Organ Toxicity (repeated exposure), Category 2 |  |
| [Midazolam](https://www.caymanchem.com/msdss/16193m.pdf) | * Acute Toxicity, Oral (Category 3) |  |
| [Minocylcine](https://www.caymanchem.com/msdss/14454m.pdf) | * Serious Eye Damage/Eye Irritation, Category 2 * Toxic To Reproduction, Effects on or via lactation |  |
| [Monensin, USP](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=1445481&brand=USP&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fusp%2F1445481%3Flang%3Den) | * Acute toxicity, Oral (Category 2) |  |
| MS-222  (Ethyl 3-aminobenzoate methanesulfonate) | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3), Respiratory system * Acute aquatic toxicity (Category 3) * Chronic aquatic toxicity(Category 3) | Collect water |
| Nodularin | * Acute toxicity, Oral (Category 2) * Acute toxicity, Inhalation (Category 1) * Acute toxicity, Dermal (Category 2) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Skin sensitisation (Category 1) * Specific target organ toxicity - single exposure (Category 3) Respiratory system |  |
| [Neomycin](https://www.caymanchem.com/msdss/14287m.pdf) | * Respiratory Sensitization, Category 1 * Skin Sensitization, Category 1 |  |
| [Ostilox (Meloxicam)](https://www.caymanchem.com/msdss/14906m.pdf) | * Acute Toxicity, Oral (Category 3) * Toxic to Reproduction (Category 1A) * Aquatic Toxicity, Chronic (Category 3) |  |
| [22-Oxacalcitriol](https://www.caymanchem.com/msdss/10794m.pdf) | * Acute Toxicity: Inhalation, Category 2 * Acute Toxicity: Oral, Category 2 * Acute Toxicity: Skin, Category 1 * Skin Corrosion/Irritation, Category 2 |  |
| Oxaliplatin | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Skin sensitisation (Category 1) Carcinogenicity (Category 2) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| Paclitaxel solution | * Flammable liquids, (Category 2), * Acute toxicity, Oral (Category 3), * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) * Specific target organ toxicity - single exposure (Category 1) |  |
| [Paricalcitol (19-nor-1, 25-(OH)2D2](https://www.caymanchem.com/msdss/17716m.pdf) | * Acute Toxicity: Oral (Category 1) * Acute Toxicity: Skin (Category 3) * Carcinogenicity (Category 2) * Toxic To Reproduction (Category 2) |  |
| Pentabarbitol solution | * Flammable liquids (Category 2) * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) * Reproductive toxicity (Category 2) * Specific target organ toxicity - single exposure (Category 1) |  |
| [Pentylenetetrazole](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=P6500&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fp6500%3Flang%3Den) | * Acute toxicity, Oral (Category 3) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| [Paraformaldehyde](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=158127&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsial%2F158127%3Flang%3Den) (Solid) | * Flammable solids (Category 2) * Acute toxicity, Oral (Category 4) * Acute toxicity, Inhalation (Category 4) * Skin irritation (Category 2) * Serious eye damage (Category 1) * Skin sensitisation (Category 1) * Carcinogenicity (Category 2) * Specific target organ toxicity - single exposure (Category 3), Respiratory system * Acute aquatic toxicity (Category 3) * Chronic aquatic toxicity (Category 3) |  |
| *Paraformaldehyde* | * Flammable liquids (Category 3) * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) * Skin corrosion (Category 1B) * Serious eye damage (Category 1) * Skin sensitisation (Category 1) * Germ cell mutagenicity (Category 2) * Carcinogenicity (Category 1A) * Specific target organ toxicity - single exposure (Category 1), Eyes * Acute aquatic toxicity (Category 3) |  |
| Penicillin | Refer to specific SDS. | There are various derivatives of antibiotics in the penicillin class. The specific SDs for each derivative must be review to determine if the antibiotic is hazardous. |
| *N-*Phenylthiourea | * Acute toxicity, Oral (Category 1) * Skin sensitization (Category 1) |  |
| [Pioglitazone](https://datasheets.scbt.com/sds/aghs/en/sc-204848.pdf) | * Serious eye damage/Eye irritation (Category 2A) |  |
| [Pilocarpine hydrochloride](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=P6503&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fp6503%3Flang%3Den) [≥98% (titration), powder](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=P6503&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fp6503%3Flang%3Den) | * Acute toxicity, Oral (Category 2) * Acute toxicity, Inhalation (Category 2) |  |
| [Piroxicam](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=P5654&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsial%2Fp5654%3Flang%3Den) | * Acute toxicity, Oral (Category 3) |  |
| [Praxxin (tulathromycin)](https://www.zoetisus.com/contact/pages/product_information/msds_pi/msds/draxxin.pdf) | * Serious Eye Damage/Eye Irritation: Category 2A * Skin Sensitization: Category 1 |  |
| [PRIMA-1 Met](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=SML1789&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fsml1789%3Flang%3Den) | * Skin irritation (Category 2) * Eye irritation (Category 2A) |  |
| Prostaglandin | * Acute toxicity, Oral (Category 4) * Reproductive toxicity (Category 1B) |  |
| [Progesterone (CIDR)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=P0130&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fp0130%3Flang%3Den) | * Carcinogenicity (Category 2) * Reproductive toxicity (Category 1B) |  |
| [Psilocybin (in methanol solution)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=P-097&brand=CERILLIAN&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3DPsilocybin%26interface%3DAll%26N%3D0%26mode%3Dmatch%2520partialmax%26lang%3Den%26region%3DUS%26focus%3Dproduct) | * Flammable liquids (Category 2) * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) * Specific target organ toxicity - single exposure (Category 1) | Note hazard info based on methanol solution. |
| [Resflor Gold (Florfenicol-Flunixin-2-Pyrrolidone Injectable Solution)](https://www.pattersonvet.com/Sds?publicItemNumber=078778447&effectiveDate=2017-10-18T00:00:00) | * Acute Toxicity (Oral), Category 4 * Acute Toxicity (Inhalation), Category 4 * Reproductive Toxicity, Category 2 * Specific target organ systemic toxicity – repeated exposure, Category 1 (Liver, Brain, Testes, Spinal Cord, Blood, Gallbladder, GI tract, Kidney) |  |
| Retinoic acid | * Acute toxicity, Oral (Category 4) * Acute aquatic toxicity (Category 2) |  |
| Riluzole | * Toxic, carcinogen |  |
| [Ronozyme P-CT-1](http://palsusa.com/wp-content/uploads/2016/05/RONOZYME-P-CT-1.pdf) | * Respiratory sensitisation, Category 1 |  |
| Rosmarinic Acid | * Acute Toxicity, Oral (Category 3) * Aquatic Toxicity, Acute (Category 1) |  |
| [Silver Sulfadiazine](https://www.fishersci.com/store/msds?partNumber=AC459650050&productDescription=SILVER+SULFADIAZINE%2C+98%25+5GR&vendorId=VN00032119&countryCode=US&language=en) | * Skin Corrosion/Irritation (Category 2) * Serious Eye Damage/Eye Irritation (Category 2) * Specific Organ Toxicity, Single Exposure (Category 3) * Target Organs: Respiratory System |  |
| Sodium Dichloroacetate | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Carcinogenicity (Category 2) * Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| [Sodium Nitroprusside](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=S0501&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fs0501%3Flang%3Den) | * Acute Toxicity, Oral (Category 3) |  |
| Sodium Propionate 2-13C | * Acute toxicity, dermal (Category 4) * Skin Irritation (Category 2) * Eye Irritation (Category 2A) * Specific target organ toxicity – single exposure (Category 3), Respiratory System |  |
| Streptozocin or Streptozotocin | * Carcinogenicity (Category 1B) |  |
| Tamoxifen | * Carcinogenicity, Category 1B * Toxic To Reproduction, Category 1B * Toxic To Reproduction, Effects on or via lactation * Acute Toxicity: Oral, Category 4 | 72 hours Research has indicated that tamoxifen may induce mutations in the developing (fetal through adolescent) human genital tract, consistent with its partial estrogen agonist activity. **Tamoxifen is a known human carcinogen, teratogen, and mutagen.** |
| Taxa-4(5), 11(12)-diene | * TBD |  |
| Temozolomide | * Acute toxicity, Oral (Category 4) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Germ cell mutagenicity (Category 1B) * Carcinogenicity (Category 1B) * Reproductive toxicity (Category 1B) Specific target organ toxicity - single exposure (Category 3), Respiratory system |  |
| TEMPOL (4-Hydroxy-TEMPO) | * Acute toxicity, Oral (Category 4) * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3) Respiratory system |  |
| Tetrabromobisphenol A | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Specific target organ toxicity - single exposure (Category 3), Respiratory system * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| [Tetrahydrocannabinol (THC) (in methanol solution)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=T4764&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Fterm%3Dthc%26interface%3DAll%26N%3D0%26mode%3Dpartialmax%26lang%3Den%26region%3DUS%26focus%3Dproduct) | * Flammable liquids (Category 2) * Acute toxicity, Oral (Category 3) * Acute toxicity, Inhalation (Category 3) * Acute toxicity, Dermal (Category 3) * Reproductive toxicity (Category 2) * Specific target organ toxicity - single exposure (Category 1), Eyes | Note hazard info based on methanol solution. |
| [Thymol](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=T0501&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Ft0501%3Flang%3Den) | * Acute toxicity, Oral (Category 4) * Skin corrosion (Category 1B) * Serious eye damage (Category 1) * Acute aquatic toxicity (Category 2) * Chronic aquatic toxicity (Category 2), |  |
| [Titanium oxide](https://www.nwmissouri.edu/naturalsciences/sds/t/Titanium%20IV%20oxide.pdf) or Titanium (IV) oxide | * Carcinogenicity (Category 2) |  |
| [Toltrazuril](https://www.caymanchem.com/msdss/20767m.pdf) | * Aquatic Toxicity, Acute (Category 1) * Aquatic Toxicity, Chronic (Category 1) |  |
| [Tram 34](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=T6700&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Ft6700%3Flang%3Den) | * Acute toxicity, Oral (Category 4) * Chronic aquatic toxicity (Category 4) |  |
| [Trazadone (hydrochloride)](https://www.caymanchem.com/msdss/19048m.pdf) | * Acute Toxicity, Oral (Category 4) * Carcinogenicity (Category 2) |  |
| Triclosan | * Skin irritation (Category 2) * Eye irritation (Category 2A) * Acute aquatic toxicity (Category 1) * Chronic aquatic toxicity (Category 1) |  |
| [Trimethylamine (45-50 wt. % aqueous solution)](https://www.fishersci.com/msdsproxy%3FproductName%3DAC370785000%26productDescription%3DTRIMETHYLAMINE%2B50%2525%2BAQUE%2B500ML%26catNo%3DAC37078-5000%26vendorId%3DVN00032119%26storeId%3D10652) | * Flammable Liquids (Category 1) * Acute Oral Toxicity (Category 4) * Acute Inhalation Toxicity, Vapors (Category 4) * Skin Corrosion/Irritation (Category 1B) * Serious Eye Damage/Eye Irritation (Category 1) * Specific Target Organ Toxicity, Single Exposure (Category 3) * Target Organs: Respiratory System |  |
| [Trimethylamine-N-oxide](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=317594&brand=ALDRICH&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Faldrich%2F317594%3Flang%3Den) | * Causes Skin Irritation (Category 2) * Causes Serious Eye Irritation (Category 2A) * Specific Target Organ Toxicity, Single Exposure (Category 3) * Target Organs: Respiratory System |  |
| [Tylosin tartrate](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=T6271&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Ft6271%3Flang%3Den) | * Respiratory sensitisation (Category 1) * Skin sensitisation (Category 1) |  |
| Ultramix C (Nutriad.com) | * Skin Irritant (Category 2) * Eye Irritant (Category 2) * Single Target Organ Toxicity (SE 3) |  |
| Urethane | * Acute toxicity, Oral (Category 4) * Carcinogenicity (Category 1B) |  |
| Vancomycin | * Respiratory sensitisation (Category 1) * Skin sensitisation (Category 1) |  |
| Vesamicol | * Toxic, carcinogen |  |
| [Vildagliptin-d7](https://www.caymanchem.com/msdss/22373m.pdf) | * Acute Toxicity: Oral (Category 4) |  |
| Vincristine | * Acute toxicity, Oral (Category 2) * Germ cell mutagenicity (Category 2) * Reproductive toxicity (Category 2) | Unknown – none, since administered in diet. |
| [Xylazine](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=X1126&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fx1126%3Flang%3Den) | * Acute toxicity, Oral (Category 3) |  |
| [Zearalenone](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=96093&brand=SIAL&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsial%2F96093%3Flang%3Den) | * Skin corrosion (Category 1B) * Serious eye damage (Category 1) * Reproductive toxicity (Category 2) |  |

For a detailed description of hazard categories associated with each hazard classification, see:

* [Health Hazard Criteria (Appendix A to OSHA Hazard Communication Standard)](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10100)
* [Physical Hazard Criteria (Appendix B to OSHA Hazard Communication Standard)](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10101)

**Physical Hazards:** Take extra precautions to avoid injury from needles and other sharps.

**Respiratory Hazards:**

* Avoid breathing bedding dust which may contain hazardous constituents.
* Respiratory protection may be required when changing cages or working outside a chemical fume hood, biosafety cabinet or ATS. The bedding, animals and related material are handled as chemically contaminated (potentially hazardous) from the time of administration through the wash out period or termination of the rodent and completion of animal work.

**TABLE 2. The following substances are non-hazardous and should** be listed in your Appendix G in Section 2: Non-Hazardous Substances.

|  |  |
| --- | --- |
| **Chemical/Chemical Product** | **Comments** |
| 1,3-benzenediol, 5,5’-(6Z)-6-tetradecene-1,14,diylbis- |  |
| 1,3-benzenediol, 5,5’-(6Z)-6-hexadecene-1,14,diylbis- |  |
| 0.9% sodium chloride (NaCl) |  |
| Abscisic Acid |  |
| Alanine |  |
| Andrographolide |  |
| AVE 0991 |  |
| butyrylcholinesterase enzyme |  |
| CPGOPN |  |
| Carfilzomib |  |
| Cellobiose mannitol lactose sucrose |  |
| Cholera Toxin B subunit |  |
| Citruline |  |
| Cobalt protoporphyrin IX (Protoporphyrin IX cobalt chloride) |  |
| Corn oil |  |
| Chromium (III) oxide |  |
| Clodronate containing liposomes |  |
| Dextran sodium sulfate |  |
| 2-deoxy-D-glucose |  |
| Elenolic acid |  |
| EdU( 5-ethynyl-2'- deoxyuridine) |  |
| Epigallacetchin gallate |  |
| Glucose |  |
| Glycyl-tryptophan dipeptide supplement |  |
| Hanks buffer |  |
| Heparin |  |
| Heparinized saline |  |
| Ferrous protoporphyrin IX |  |
| Herbal supplement of: Angelica, Rheum, Atractyloids, Citrus, Glycyrrihiza, Manolia, Phellodendron, Coptis, Curcuma and Trichosnthes species |  |
| Hispidulin |  |
| Icabant |  |
| IC-261 |  |
| γ-Hydroxybutyric acid sodium salt (GHB) |  |
| Ketorolac |  |
| Mannitol |  |
| Methylcellulose |  |
| Murabutide |  |
| Oleic Acid |  |
| [Penicillin (Penicillin G sodium salt)](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=13752&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2F13752%3Flang%3Den) |  |
| Phosphate buffered saline (PBS) |  |
| Polyethylene glycol |  |
| [PMSG](https://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=US&language=en&productNumber=G4877&brand=SIGMA&PageToGoToURL=https%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fproduct%2Fsigma%2Fg4877%3Flang%3Den)/[PMSG](https://www.biovendor.com/file/7122/RP1782725000_msds-pregnant-mare-serum-gonadotropin.pdf) |  |
| ProPhorce SR  (Perstorp.com) |  |
| Punicic Acid |  |
| Pyruvate |  |
| Resveratrol |  |
| Rosiglitazone |  |
| Ruxolitinib (INCB018424) |  |
| Sodium oxamate |  |
| Sphingomyelin |  |
|  |  |
|  |  |

**TABLE 3. Pharmaceuticals**