# SAFETY DATA SHEETS

## This SDS packet was issued with item:

078948462

N/A

## SECTION 1: IDENTIFICATION

| | |
|---|---|
| **1.1 Product identifier** | |
| **Product name** | Ketamine hydrochloride Injection |
| **Chemical name** | Not Applicable |
| **Synonyms** | Not Available |
| **Chemical formula** | Not Applicable |
| **Other means ofidentification** | Not Available |
| **1.2 Recommended use of the chemical and restrictions on use** | |
| **Relevant identified uses** | Anesthetic |
| **1.3 Details of the supplier of the substance or mixture** | |
| **Registered company name (US)** | Dechra Veterinary Products |
| **Address** | 7015 College Blvd Suite 525<br>Overland Park, KS 66211 USA |
| **Telephone** | 866-933-2472 |
| **Fax** | Not Available |
| **Email** | Not Available |
| **1.4 Emergency telephone numbers** | |
| **Dechra (US)** | 866-933-2472 |

## SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture**

**NFPA 704 diamond**


Note: The hazard category numbers found in GHS classification insection 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

| | |
|---|---|
| **Classification** | Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2 |
| **2.2 Label elements** | |
| **Hazard pictogram(s)** |  |
| **Signal word** | Warning |
| **Hazard statement(s)** | |
| **H315** | Causes skin irritation. |
| **H319** | Causes serious eye irritation. |
| **H351** | Suspected of causing cancer. |
| **H361** | Suspected of damaging fertility or the unborn child. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **Hazard(s) not otherwise classified**<br>Not Applicable | |
| **Precautionary statement(s) prevention** | |
| **P201** | Obtain special instructions before use. |
| **P260** | Do not breathe mist/vapours/spray. |
| **P280** | Wear protective gloves, protective clothing, eye protection and face protection. |
| **P202** | Do not handle until all safety precautions have been read and understood. |
| **P264** | Wash all exposed external body areas thoroughly after handling. |
| **Precautionary statement(s) response** | |
| **P308+P313** | IF exposed or concerned: Get medical advice/ attention. |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **P314** | Get medical advice/attention if you feel unwell. |
| **P337+P313** | If eye irritation persists: Get medical advice/attention. |
| **P302+P352** | IF ON SKIN: Wash with plenty of water. |
| **P332+P313** | If skin irritation occurs: Get medical advice/attention. |
| **P362+P364** | Take off contaminated clothing and wash it before reuse. |
| **Precautionary statement(s) storage** | |
| **P405** | Store locked up. |
| **Precautionary statement(s) disposal** | |
| **P501** | Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation. |

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

**3.1 Substances**
See section above for composition of Mixtures.

**3.2 Mixtures**

| CAS No. | % [weight] | Name |
|---|---|---|
| 1867-66-9 | 10-30 | ketamine hydrochloride |
| 121-54-0 | <1 | benzethonium chloride |
| Not Available | >60 | Ingredients determined not to be hazardous |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures**

| | |
|---|---|
| **Eye contact** | Wash out immediately with fresh running water. Seek medical attention without delay; if pain persists or recurs seek medical attention. |
| **Skin contact** | Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
| **Inhalation** | If dust is inhaled remove from contaminated area. Encourage patient to blow nose to ensure clear passage of breathing. If irritation or discomfort persists seek medical attention. |
| **Ingestion** | **IF SWALLOWED,** do **NOT** induce vomiting**.** If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. |

**4.2 Most important symptoms and effects, both acute and delayed**
See section 11

**4.3 Indication of immediate medical attention and special treatment needed**
Treat symptomatically.
Many drugs have been found that lessen the risk of neurotoxicity from NMDA receptor antagonists. Centrally acting alpha 2 agonists such as clonidine and guanfacine are thought to most directly target the etiology of NMDA neurotoxicity. Other drugs acting on various neurotransmitter systems known to inhibit NMDA antagonist neurotoxicity include: anticholinergics, diazepam, barbiturates, ethanol 5-HT2A serotonin receptor agonists, anticonvulsants and muscimol.
Psychedelic-induced personality disorders can be severe and prolonged.
Appropriate treatment often requires antipsychotic medication (antipsychotics, neuroleptics, major tranquillizers) and residential care in a mental health facility. In certain cases, psychedelic-induced chronic psychological problems lead to complicated patterns of polydrug abuse that requires additional treatment approaches.

## SECTION 5: FIRE FIGHTING MEASURES

**5.1 Extinguishing media**
The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas. Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider: foam, dry chemical powder, carbon dioxide

**5.2 Special hazards arising from the substance or mixture**

| | |
|---|---|
| **Fire incompatibility** | None known |

**5.3 Special protective actions for fire-fighters:**

| | |
|---|---|
| **Firefighting** | Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area. Avoid spraying water onto liquid pools. **DO NOT** approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. |
| **Fire / explosion hazard** | The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke. Decomposes on heating and produced toxic fumes of carbon dioxide, hydrogen chloride, phosgene, nitrogen oxides, other pyrolysis products typical of burning organic material. May emit poisonous/corrosive fumes. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
See Section 8

**6.2 Environmental precautions**
See Section 12

**6.3 Methods and material for containment and cleaning up**

| | |
|---|---|
| **Minor spills** | Clean up all spills immediately. Avoid breathing vapors and contact with skin and eyes. Control personal |

| | |
|---|---|
| | contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal. |
| **Major spills** | Moderate hazard.<br>Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After cleanup operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services. |
| Personal Protective Equipment advice is contained in Section 8 of the SDS. | |

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

| | |
|---|---|
| **Safe handling** | **DO NOT** allow clothing wet with material to stay in contact with skin. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. **DO NOT** enter confined spaces until atmosphere has been checked. **DO NOT** allow material to contact humans, exposed food or food utensils Avoid contact with incompatible materials. Keep containers securely sealed when not in use. Avoid physical damage to containers. Observe manufacturer's storage and handling recommendations. |
| **Other information** | NOTE: Special security requirements may be mandated under Federal/State Regulation(s).. Store in original containers. Store in vault fitted with warning devices or detectors recommended by various Federal/State authorities. Store in vault used only for the purpose of storage of drugs of addiction.<br>Vault must be locked at all times except when the materials stored therein are required. Keep containers securely sealed. Keep dry.<br>Protect containers against physical damage and check regularly for leaks. |

### 7.2 Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| **Suitable container** | Glass vials. Packaging as recommended by manufacturer. Check that containers are clearly labelled. Tamper-proof containers. Polyethylene or polypropylene containers. Metal drum with sealed plastic liner. Glass container is suitable for laboratory quantities |
| **Storage incompatibility** | None known. |

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

**Occupational exposure limits (OEL)**
INGREDIENT DATA
Not Available

**Emergency limits**

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|---|---|---|---|
| Ketamine Hydrochloride Injection | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|---|---|---|
| ketamine hydrochloride | Not Available | Not Available |
| benzethonium chloride | Not Available | Not Available |

**Occupational Exposure Banding**

| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit |
|---|---|---|
| ketamine hydrochloride | E | ≤ 0.01 mg/m³ |
| benzethonium chloride | E | ≤ 0.01 mg/m³ |

***Notes:*** Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical'spotency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposureband (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

**MATERIAL DATA**

### 8.2 Exposure controls

| | |
|---|---|
| **Appropriate engineering controls** | Enclosed local exhaust ventilation is required at points of dust, fume or vapour generation.<br>HEPA terminated local exhaust ventilation should be considered at point of generation of dust, fumes or vapours. Barrier protection or laminar flow cabinets should be considered for laboratory scale handling.<br>A fume hood or vented balance enclosure is recommended for weighing/ transferring quantities exceeding 500 mg.<br>When handling quantities up to 500 gram in either a standard laboratory with general dilution ventilation (e.g. 6-12 air changes per hour) is preferred. Quantities up to 1 kilogram may require a designated laboratory using fume hood, biological safety cabinet, or approved vented enclosures. Quantities exceeding 1 kilogram should be handled in a designated laboratory or containment laboratory using appropriate barrier/ containment technology.<br>Manufacturing and pilot plant operations require barrier/ containment and direct coupling technologies. |

| | |
|---|---|
| **Personal protection** |  |
| **Eye and face protection** | When handling very small quantities of the material eye protection may not be required.<br>For laboratory, larger scale or bulk handling or where regular exposure in an occupational setting occurs, use safety glasses with side shields or chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. |
| **Skin protection** | See Hand protection below. |
| **Hands/feet protection** | Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. |
| **Body protection** | See Other protection below |
| **Other protection** | For quantities up to 500 grams a laboratory coat may be suitable.<br>For quantities up to 1 kilogram a disposable laboratory coat or coverall of low permeability is recommended. Coveralls should be buttoned at collar and cuffs.<br>For quantities over 1 kilogram and manufacturing operations, wear disposable coverall of low permeability and disposable shoe covers.<br>For manufacturing operations, air-supplied full body suits may be required for the provision of advanced respiratory protection. Eye wash unit. Ensure there is ready access to an emergency shower. For Emergencies: Vinyl suit |
| **Respiratory protection** | Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent) |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance: Clear, colorless liquid | Vapor density: NA |
| Physical state: Liquid | Auto ignition temperature (°C): NA |
| Odor: Not available | Decomposition temperature (°C): NA |
| Odor threshold: NA | Viscosity (°C): NA |
| pH (as supplied): 3.5-5.5 | Explosive properties: NA |
| Melting point / freezing point (°C): NA | Oxidizing properties: NA |
| Initial boiling point and boiling range: NA | Partition coefficient: NA |
| Flash point: NA | Molecular weight: NA |
| Evaporation rate: NA | Taste: NA |
| Flammability: NA | Surface tension: NA |
| Upper/lower flammability or explosive limits: NA | Volatile component (%vol): NA |
| Vapor pressure: NA | Gas group: NA |
| Relative density (at °C): 1.02-1.04 | pH as a solution: NA |
| Solubility in water (mg/l): Miscible | VOC g/L: NA |
| | Specific gravity @ 20°C (water = 1): NA |

## 10: STABILITY AND REACTIVITY

| | |
|---|---|
| **Reactivity** | See Section 7 |
| **Chemical stability** | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerization will not occur. |
| **Possibility of hazardous reactions** | See Section 7 |
| **Conditions to avoid** | See Section 7 |
| **Incompatible materials** | See Section 7 |
| **Hazardous composition** | See Section 5 |

## SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Inhalation** | The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.<br>Ketamine exposure may produce psychological manifestations such as hallucinations, dream-like states. |
| **Ingestion** | Accidental ingestion of the material may be damaging to the health of the individual. |
| **Skin contact** | Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The material may accentuate any pre-existing dermatitis condition. |
| **Eye contact** | Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals. Repeated or prolonged eye contact may cause inflammation. |

| | |
|---|---|
| **Chronic** | On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. |

| | | |
|---|---|---|
| Ketamine Hydrochloride Injection | **Acute toxicity** | **Irritation** |
| | Not Available | Not Available |
| ketamine hydrochloride | **Acute toxicity** | **Irritation** |
| | Oral (rat) $LD_{50}$: 447 mg/kg[2] | Not Available |
| benzethonium chloride | **Acute toxicity** | **Irritation** |
| | Dermal (rabbit) $LD_{50}$: 3000 mg/kg[2]<br>Oral (rat) $LD_{50}$: 295 mg/kg[1] | Eye (rabbit): 0.03 mg - SEVERE<br>Eye: no adverse effect observed (not irritating)[1]<br>Skin (rabbit): SEVERE*<br>Skin: adverse effect observed (corrosive)[1] |

1 Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

| | | | |
|---|---|---|---|
| Acute Toxicity | ✗ | Carcinogenicity | ✗ |
| Skin Irritation/Corrosion | ✓ | Reproductivity | ✓ |
| Serios Eye Damage/Irritation | ✓ | STOT – Single Exposure | ✗ |
| Respiratory or Skin Sensitization | ✗ | STOT – Repeated Exposure | ✓ |
| Mutagenicity | ✗ | Aspiration Hazard | ✗ |

✗ - Data either not available or does not fill the criteria for classification, ✓ - Data available to make classification.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity**

| | | | | | |
|---|---|---|---|---|---|
| Ketamine Hydrochloride Injection | **Endpoint** | **Test Duration** | **Species** | **Value** | **Source** |
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| ketamine hydrochloride | **Endpoint** | **Test duration** | **Species** | **Value** | **Source** |
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| benzethonium chloride | **Endpoint** | **Test duration** | **Species** | **Value** | **Source** |
| | EC50<br>NOEC(ECx)<br>LC50 | 72h<br>72h<br>96h | Algae or other aquatic plants<br>Algae or other aquatic plants<br>Fish | 0.12mg/l<br>0.038mg/l<br>1.4-53mg/l | 2<br>2<br>Not Available |

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8.Vendor Data

**NOT** discharge into sewer or waterways.

**12.2 Persistence and degradability**

| **Ingredient** | **Persistence: Water/Soil** | **Persistence: Air** |
|---|---|---|
| benzethonium chloride | HIGH | HIGH |

**12.3 Bioaccumulative potential**

| **Ingredient** | **Bioaccumulation** |
|---|---|
| ketamine hydrochloride | LOW (LogKOW = 2.18) |
| benzethonium chloride | HIGH (LogKOW = 5.9969) |

**12.4 Mobility in soil**

| **Ingredient** | **Mobility** |
|---|---|
| benzethonium chloride | LOW (KOC = 443300) |

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

| | |
|---|---|
| **Product/ packaging disposal** | Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/recycling if possible. Otherwise, if container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product.<br>**DO NOT** reuse containers. Bury empty containers in an authorised landfill.<br>**DO NOT** allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. Observe all label safeguards until containers are cleaned and destroyed. Any unused veterinary medicinal product or waste material derived from such veterinary medicinal products should be disposed of in accordance with national requirements. |

## SECTION 14: TRANSPORT INFORMATION

**Labels required**

| | |
|---|---|
| **Marine pollutant** | NO |

**Land transport (US: DOT)**

Not regulated for transport of dangerous goods

**Land transport (ICAO-IATA / DGR)**

Not regulated for transport of dangerous goods

**Land transport IMDG-Code / GGVSee)**

Not regulated for transport of dangerous goods

**Transport in bulk according to Annex II of MARPOL and the IBC code**

Not Applicable

**Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code**

| Product name | Group |
|---|---|
| ketamine hydrochloride | Not Available |
| benzethonium chloride | Not Available |

**Transport in bulk in accordance with the ICG Code**

| Product name | Ship type |
|---|---|
| ketamine hydrochloride | Not Available |
| benzethonium chloride | Not Available |

## SECTION 15: REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations / legislation specific for thesubstance or mixture**

Product regulated by FDA as a veterinary product.

**ketamine hydrochloride is found on the following regulatory lists**

Not Applicable

**benzethonium chloride is found on the following regulatory lists**

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory, US TSCA Chemical Substance Inventory - Interim List of Active Substances

**Federal Regulations**

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Section 311/312 hazard categories**

| | |
|---|---|
| Flammable (Gases, Aerosols, Liquids, or Solids) | No |
| Gas under pressure | No |
| Explosive | No |
| Self-heating | No |
| Pyrophoric (Liquid or Solid) | No |
| Pyrophoric Gas | No |
| Corrosive to metal | No |
| Oxidizer (Liquid, Solid or Gas) | No |
| Organic Peroxide | No |
| Self-reactive | No |
| In contact with water emits flammable gas | No |
| Combustible Dust | No |
| Carcinogenicity | No |
| Acute toxicity (any route of exposure) | No |
| Reproductive toxicity | Yes |
| Skin Corrosion or Irritation | Yes |
| Respiratory or Skin Sensitization | No |
| Serious eye damage or eye irritation | Yes |
| Specific target organ toxicity (single or repeated exposure) | Yes |
| Aspiration Hazard | No |
| Germ cell mutagenicity | No |
| Simple Asphyxiant | No |
| Hazards Not Otherwise Classified | No |

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

None reported

**State Regulations**

US. California Proposition 65

None reported

**National Inventory Status**

| | |
|---|---|
| Australia - AIIC / AustraliaNon-Industrial Use | Yes |
| Canada - DSL | No (ketamine hydrochloride) |
| Canada - NDSL | No (ketamine hydrochloride; benzethonium chloride) |
| China - IECSC | No (ketamine hydrochloride) |
| Europe - EINEC / ELINCS /NLP | Yes |
| Japan - ENCS | No (ketamine hydrochloride) |
| Korea - KECI | No (ketamine hydrochloride) |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | Yes |
| USA - TSCA | No (ketamine hydrochloride) |
| Taiwan - TCSI | Yes |

| | |
|---|---|
| Mexico - INSQ | No (ketamine hydrochloride) |
| Vietnam - NCI | No (ketamine hydrochloride) |
| Russia - FBEPH | No (ketamine hydrochloride) |

Yes = All CAS declared ingredients are on the inventory
No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will requireregistration

## SECTION 16: OTHER INFORMATION

Initial date: 10 August 2022

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

**Definitions and abbreviations**

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
IDLH: Immediately Dangerous to Life or Health Concentrations
AIIC: Australian Inventory of Industrial Chemicals
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
ENCS: Existing and New Chemical Substances Inventory
PICCS: Philippine Inventory of Chemicals and Chemical Substances
INSQ: Inventario Nacional de Sustancias Químicas
NCI: National Chemical Inventory
FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances
NZIoC: New Zealand Inventory of Chemicals

STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
NLP: No-Longer Polymers
KECI: Korea Existing Chemicals Inventory
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory

The information provided in this Safety Data Sheet has been compiled by Dechra Veterinary Products LLC and is correct to the best of its knowledge, information and belief as of the date of its publication. However, Dechra Veterinary Products LLC makes no warranties, express or implied, in relation to the information set out in this Safety Data Sheet, including, without limitation, as to its accuracy or completeness. The information provided is not a quality specification, and is prepared by way of guidance as to the safe handling, use, processing, storage, transportation, disposal and release of the relevant products referred to. The user is responsible for determining whether or not the product is fit for any particular purpose and/or suitable for the user's proposed method of use and application.