

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

Virbac (Australia) Pty Limited

Chemwatch Hazard Alert Code: 1

Chemwatch: 6969062

Issue Date: 17/06/2016

Version No: 2.1.1.1

Print Date: 21/06/2016

Safety Data Sheet according to WHS and ADG requirements

Initial Date: **Not Available**  
S.GHS.AUS.EN

### SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### Product Identifier

|                                      |   |
|--------------------------------------|---|
| <b>Product name</b>                  | NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES |
| <b>Synonyms</b>                      | APVMA No: 45373                                       |
| <b>Other means of identification</b> | Not Available   |

#### Relevant identified uses of the substance or mixture and uses advised against

|                                 |  |
|---------------------------------|--|
| <b>Relevant identified uses</b> | Mild diuretic and urinary buffer for horses. |
|---------------------------------|--|

#### Details of the supplier of the safety data sheet

|                                |   |
|--------------------------------|---|
| <b>Registered company name</b> | Virbac (Australia) Pty Limited              |
| <b>Address</b>                 | 361 Horsly Road Milperra NSW 2214 Australia |
| <b>Telephone</b>               | 1800 242 100                                |
| <b>Fax</b>                     | +61 2 9772 9773                             |
| <b>Website</b>                 | www.virbac.com.au                           |
| <b>Email</b>                   | au_customerservice@virbac.com.au            |

#### Emergency telephone number

|  |                            |
|--|----------------------------|
| <b>Association / Organisation</b>        | Poisons Information Centre |
| <b>Emergency telephone numbers</b>       | 13 11 26                   |
| <b>Other emergency telephone numbers</b> | Not Available              |

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

**NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS.** According to the WHS Regulations and the ADG Code.

#### CHEMWATCH HAZARD RATINGS

|              | Min | Max |   |
|--------------|-----|-----|---|
| Flammability | 0   |     | 0 = Minimum<br>1 = Low<br>2 = Moderate<br>3 = High<br>4 = Extreme |
| Toxicity     | 0   |     |   |
| Body Contact | 0   |     |   |
| Reactivity   | 1   |     |   |
| Chronic      | 0   |     |   |

|                         |                |
|-------------------------|----------------|
| <b>Poisons Schedule</b> | Not Applicable |
| <b>Classification</b>   | Not Applicable |

#### Label elements

|                           |                |
|---------------------------|----------------|
| <b>GHS label elements</b> | Not Applicable |
|---------------------------|----------------|

|                    |                       |
|--------------------|-----------------------|
| <b>SIGNAL WORD</b> | <b>NOT APPLICABLE</b> |
|--------------------|-----------------------|

#### Hazard statement(s)

Not Applicable

#### Precautionary statement(s) Prevention

Not Applicable

#### Precautionary statement(s) Response

Not Applicable

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

### Precautionary statement(s) Storage

Not Applicable

### Precautionary statement(s) Disposal

Not Applicable

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Substances

See section below for composition of Mixtures

### Mixtures

| CAS No        | %[weight] | Name                                       |
|---------------|-----------|--|
| 57-50-1       | >50       | <u>sucrose</u>                             |
| 68-04-2       | 10-30     | <u>sodium citrate</u>                      |
| Not Available | <5        | Ingredients determined not to be hazardous |
| 7732-18-5     | 1-10      | <u>water</u>                               |

## SECTION 4 FIRST AID MEASURES

### Description of first aid measures

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | <p>If this product comes in contact with eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with water.</li> <li>▶ If irritation continues, seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul> |
| <b>Skin Contact</b> | <p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>   |
| <b>Inhalation</b>   | <ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>  |
| <b>Ingestion</b>    | <ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>  |

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5 FIREFIGHTING MEASURES

### Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

### Special hazards arising from the substrate or mixture

|                             |  |
|-----------------------------|--|
| <b>Fire Incompatibility</b> | ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|-----------------------------|--|

### Advice for firefighters

|                              |  |
|------------------------------|--|
| <b>Fire Fighting</b>         | <ul style="list-style-type: none"> <li>▶ Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>▶ <b>Do not</b> approach containers suspected to be hot.</li> <li>▶ Cool fire exposed containers with water spray from a protected location.</li> <li>▶ If safe to do so, remove containers from path of fire.</li> <li>▶ Equipment should be thoroughly decontaminated after use.</li> </ul>  |
| <b>Fire/Explosion Hazard</b> | <ul style="list-style-type: none"> <li>▶ The material is not readily combustible under normal conditions.</li> <li>▶ However, it will break down under fire conditions and the organic component may burn.</li> <li>▶ Not considered to be a significant fire risk.</li> <li>▶ Heat may cause expansion or decomposition with violent rupture of containers.</li> <li>▶ Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</li> <li>▶ May emit acrid smoke.</li> </ul> <p>Other decomposition products include; carbon dioxide (CO<sub>2</sub>) other pyrolysis products typical of burning organic material</p> |

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

|                     |  |
|---------------------|--|
| <b>Minor Spills</b> | <ul style="list-style-type: none"> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> <li>▶ Control personal contact with the substance, by using protective equipment.</li> <li>▶ Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>▶ Wipe up.</li> <li>▶ Place in a suitable, labelled container for waste disposal.</li> </ul> |
| <b>Major Spills</b> | <ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Control personal contact with the substance, by using protective equipment.</li> <li>▶ Prevent spillage from entering drains, sewers or water courses.</li> </ul>  |

Continued...

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

- ▶ Recover product wherever possible.
- ▶ Put residues in labelled containers for disposal.
- ▶ 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

## Precautions for safe handling

|                          |  |
|--------------------------|--|
| <b>Safe handling</b>     | <ul style="list-style-type: none"> <li>▶ Limit all unnecessary personal contact.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Avoid contact with incompatible materials.</li> <li>▶ When handling, <b>DO NOT eat, drink or smoke.</b></li> <li>▶ Keep containers securely sealed when not in use.</li> <li>▶ Avoid physical damage to containers.</li> <li>▶ Always wash hands with soap and water after handling.</li> <li>▶ Work clothes should be laundered separately.</li> <li>▶ Use good occupational work practice.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>▶ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul> |
| <b>Other information</b> | <ul style="list-style-type: none"> <li>▶ Store in original containers.</li> <li>▶ Keep containers securely sealed.</li> <li>▶ Store in a cool, dry, well-ventilated area.</li> <li>▶ Store away from incompatible materials and foodstuff containers.</li> <li>▶ Protect containers against physical damage and check regularly for leaks.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>  |

## Conditions for safe storage, including any incompatibilities

|                                |   |
|--------------------------------|---|
| <b>Suitable container</b>      | <ul style="list-style-type: none"> <li>▶ Polyethylene or polypropylene container.</li> <li>▶ Packing as recommended by manufacturer.</li> <li>▶ Check all containers are clearly labelled and free from leaks.</li> </ul> |
| <b>Storage incompatibility</b> | <p>Avoid contamination of water, foodstuffs, feed or seed.</p> <ul style="list-style-type: none"> <li>▶ Avoid reaction with oxidising agents</li> </ul>   |

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

## Control parameters

## OCCUPATIONAL EXPOSURE LIMITS (OEL)

## INGREDIENT DATA

| Source                       | Ingredient | Material name | TWA      | STEL          | Peak          | Notes         |
|------------------------------|------------|---------------|----------|---------------|---------------|---------------|
| Australia Exposure Standards | sucrose    | Sucrose       | 10 mg/m3 | Not Available | Not Available | Not Available |

## EMERGENCY LIMITS

| Ingredient     | Material name                          | TEEL-1    | TEEL-2    | TEEL-3     |
|----------------|--|-----------|-----------|------------|
| sucrose        | Sucrose                                | 30 mg/m3  | 980 mg/m3 | 5900 mg/m3 |
| sodium citrate | Citric acid, trisodium salt, dihydrate | 9.3 mg/m3 | 100 mg/m3 | 610 mg/m3  |
| sodium citrate | Trisodium citrate                      | 9.3 mg/m3 | 100 mg/m3 | 610 mg/m3  |

| Ingredient                                 | Original IDLH | Revised IDLH  |
|--|---------------|---------------|
| sucrose                                    | Not Available | Not Available |
| sodium citrate                             | Not Available | Not Available |
| Ingredients determined not to be hazardous | Not Available | Not Available |
| water                                      | Not Available | Not Available |

## Exposure controls

|   |  |                      |            |   |                             |
|---|--|----------------------|------------|---|-----------------------------|
| <b>Appropriate engineering controls</b>                                 | <p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.</p> <p>Employers may need to use multiple types of controls to prevent employee overexposure.</p> <p>General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.</p> |                      |            |   |                             |
|   | <table border="1"> <tr> <td>Type of Contaminant:</td> <td>Air Speed:</td> </tr> <tr> <td>solvent, vapours, degreasing etc., evaporating from tank (in still air)</td> <td>0.25-0.5 m/s (50-100 f/min)</td> </tr> </table>  | Type of Contaminant: | Air Speed: | solvent, vapours, degreasing etc., evaporating from tank (in still air) | 0.25-0.5 m/s (50-100 f/min) |
| Type of Contaminant:  | Air Speed:   |                      |            |   |                             |
| solvent, vapours, degreasing etc., evaporating from tank (in still air) | 0.25-0.5 m/s (50-100 f/min)  |                      |            |   |                             |

Continued...

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

|   | <p>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</p> <p>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</p> <p>grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).</p>  | <p>0.5-1 m/s (100-200 f/min.)</p> <p>1-2.5 m/s (200-500 f/min)</p> <p>2.5-10 m/s (500-2000 f/min.)</p> |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
|---|---|--|------------------------|------------------------|---|---------------------------------|---|----------------------------------|----------------------------------|-------------------------------|---|------------------------------------|
|   | <p>Within each range the appropriate value depends on:</p> <table border="1"> <thead> <tr> <th>Lower end of the range</th> <th>Upper end of the range</th> </tr> </thead> <tbody> <tr> <td>1: Room air currents minimal or favourable to capture</td> <td>1: Disturbing room air currents</td> </tr> <tr> <td>2: Contaminants of low toxicity or of nuisance value only</td> <td>2: Contaminants of high toxicity</td> </tr> <tr> <td>3: Intermittent, low production.</td> <td>3: High production, heavy use</td> </tr> <tr> <td>4: Large hood or large air mass in motion</td> <td>4: Small hood - local control only</td> </tr> </tbody> </table> <p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p>  |  | Lower end of the range | Upper end of the range | 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents | 2: Contaminants of low toxicity or of nuisance value only | 2: Contaminants of high toxicity | 3: Intermittent, low production. | 3: High production, heavy use | 4: Large hood or large air mass in motion | 4: Small hood - local control only |
| Lower end of the range                                    | Upper end of the range  |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| 1: Room air currents minimal or favourable to capture     | 1: Disturbing room air currents   |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| 2: Contaminants of low toxicity or of nuisance value only | 2: Contaminants of high toxicity  |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| 3: Intermittent, low production.                          | 3: High production, heavy use   |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| 4: Large hood or large air mass in motion                 | 4: Small hood - local control only  |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Personal protection</b>                                |    |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Eye and face protection</b>                            | <ul style="list-style-type: none"> <li>▶ Safety glasses with side shields; or as required,</li> <li>▶ Chemical goggles.</li> <li>▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>   |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Skin protection</b>                                    | See Hand protection below   |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Hands/feet protection</b>                              | <p>Wear general protective gloves, eg. light weight rubber gloves.</p> <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:</p> <ul style="list-style-type: none"> <li>▶ frequency and duration of contact,</li> <li>▶ chemical resistance of glove material,</li> <li>▶ glove thickness and</li> <li>▶ dexterity</li> </ul> <p>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ 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.</li> <li>▶ Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>▶ Contaminated gloves should be replaced.</li> </ul> <p>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p> |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Body protection</b>                                    | See Other protection below  |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Other protection</b>                                   | <p>No special equipment needed when handling small quantities.</p> <p><b>OTHERWISE:</b></p> <ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ Barrier cream.</li> <li>▶ Eyewash unit.</li> </ul>  |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |
| <b>Thermal hazards</b>                                    | Not Available   |  |                        |                        |   |                                 |   |                                  |                                  |                               |   |                                    |

**Recommended material(s)****GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

**"Forsberg Clothing Performance Index".**

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

| Material       | CPI |
|----------------|-----|
| BUTYL          | C   |
| NATURAL RUBBER | C   |
| NEOPRENE       | C   |
| PVA            | C   |

**Respiratory protection**

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|------------------------|
| up to 10 x ES                      | A-AUS                | -                    | A-PAPR-AUS / Class 1   |
| up to 50 x ES                      | -                    | A-AUS / Class 1      | -                      |

Continued...

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

|       |   |                |   |     |            |
|-------|---|----------------|---|-----|------------|
| VITON | C | up to 100 x ES | - | A-2 | A-PAPR-2 ^ |
|-------|---|----------------|---|-----|------------|

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

**NOTE:** As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

|   |  |  |                |
|---|--|--|----------------|
| <b>Appearance</b>                                   | Liquid with slight caramel odour; miscible with water. |  |                |
| <b>Physical state</b>                               | Liquid   | <b>Relative density (Water = 1)</b>            | 1.10-1.30      |
| <b>Odour</b>  | Not Available  | <b>Partition coefficient n-octanol / water</b> | Not Available  |
| <b>Odour threshold</b>                              | Not Available  | <b>Auto-ignition temperature (°C)</b>          | Not Applicable |
| <b>pH (as supplied)</b>                             | Not Available  | <b>Decomposition temperature</b>               | Not Available  |
| <b>Melting point / freezing point (°C)</b>          | Not Available  | <b>Viscosity (cSt)</b>                         | Not Available  |
| <b>Initial boiling point and boiling range (°C)</b> | Not Available  | <b>Molecular weight (g/mol)</b>                | Not Applicable |
| <b>Flash point (°C)</b>                             | Not Applicable   | <b>Taste</b>                                   | Not Available  |
| <b>Evaporation rate</b>                             | Not Available  | <b>Explosive properties</b>                    | Not Available  |
| <b>Flammability</b>                                 | Not Applicable   | <b>Oxidising properties</b>                    | Not Available  |
| <b>Upper Explosive Limit (%)</b>                    | Not Applicable   | <b>Surface Tension (dyn/cm or mN/m)</b>        | Not Available  |
| <b>Lower Explosive Limit (%)</b>                    | Not Applicable   | <b>Volatile Component (%vol)</b>               | Not Available  |
| <b>Vapour pressure (kPa)</b>                        | Not Available  | <b>Gas group</b>                               | Not Available  |
| <b>Solubility in water (g/L)</b>                    | Miscible   | <b>pH as a solution (1%)</b>                   | Not Available  |
| <b>Vapour density (Air = 1)</b>                     | Not Available  | <b>VOC g/L</b>                                 | Not Available  |

## SECTION 10 STABILITY AND REACTIVITY

|   |   |
|---|---|
| <b>Reactivity</b>                         | See section 7   |
| <b>Chemical stability</b>                 | Product is considered stable and hazardous polymerisation will not occur. |
| <b>Possibility of hazardous reactions</b> | See section 7   |
| <b>Conditions to avoid</b>                | See section 7   |
| <b>Incompatible materials</b>             | See section 7   |
| <b>Hazardous decomposition products</b>   | See section 5   |

## SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

|  |   |                 |                   |               |               |
|--|---|-----------------|-------------------|---------------|---------------|
| <b>Inhaled</b>   | The material is not thought to produce adverse health effects or irritation of the respiratory tract (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.                                 |                 |                   |               |               |
| <b>Ingestion</b>   | Extremely large oral doses of sucrose may cause gastro-intestinal disturbance. It has been estimated from oral rat LD50's that the equivalent of a pound of candy would produce symptoms of acute gastroenteritis in a 25 pound child. This quantity would almost certainly prompt vomiting in humans and so obviate the risk of gastroenteritis. |                 |                   |               |               |
| <b>Skin Contact</b>  | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.   |                 |                   |               |               |
| <b>Eye</b>   | Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).  |                 |                   |               |               |
| <b>Chronic</b>   | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.  |                 |                   |               |               |
| <b>NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES</b> | <table border="1"> <tr> <td><b>TOXICITY</b></td> <td><b>IRRITATION</b></td> </tr> <tr> <td>Not Available</td> <td>Not Available</td> </tr> </table>   | <b>TOXICITY</b> | <b>IRRITATION</b> | Not Available | Not Available |
| <b>TOXICITY</b>  | <b>IRRITATION</b>   |                 |                   |               |               |
| Not Available  | Not Available   |                 |                   |               |               |

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

|                |   |               |
|----------------|---|---------------|
| sucrose        | TOXICITY                                      | IRRITATION    |
|                | Oral (rat) LD50: 29700 mg/kg <sup>[2]</sup>   | Nil reported  |
| sodium citrate | TOXICITY                                      | IRRITATION    |
|                | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> | Not Available |
|                | Oral (mouse) LD50: 5400 mg/kg <sup>[1]</sup>  |               |
| water          | TOXICITY                                      | IRRITATION    |
|                | Oral (rat) LD50: >90000 mg/kg <sup>[2]</sup>  | Not Available |

**Legend:** 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.\* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

|                |   |
|----------------|---|
| SUCROSE        | Oral (Human) TDL0: 9.6E-5 mg/kg   |
| SODIUM CITRATE | for citric acid (and its inorganic citrate salts)<br>Based on many experimental data in animals and on human experience, citric acid is of low acute toxicity. The NOAEL for repeated dose toxicity for rats is 1200 mg/kg/d. The major, reversible (sub)chronic toxic effects seem to be limited to changes in blood chemistry and metal absorption/excretion kinetics. Citric acid is not suspected of being a carcinogen nor a reprotoxic or teratogenic agent. The NOAEL for reproductive toxicity for rats is 2500 mg/kg/d. Further, it is not mutagenic <i>in vitro</i> and <i>in vivo</i> . Also, the sensitising potential is seen as low. In contrast, irritation, in particular of the eyes but also of the respiratory pathways and the skin, is the major toxicological hazard presented by citric acid |
| WATER          | No significant acute toxicological data identified in literature search.  |

|                                   |                       |                          |                       |
|-----------------------------------|-----------------------|--------------------------|-----------------------|
| Acute Toxicity                    | <input type="radio"/> | Carcinogenicity          | <input type="radio"/> |
| Skin Irritation/Corrosion         | <input type="radio"/> | Reproductivity           | <input type="radio"/> |
| Serious Eye Damage/Irritation     | <input type="radio"/> | STOT - Single Exposure   | <input type="radio"/> |
| Respiratory or Skin sensitisation | <input type="radio"/> | STOT - Repeated Exposure | <input type="radio"/> |
| Mutagenicity                      | <input type="radio"/> | Aspiration Hazard        | <input type="radio"/> |

**Legend:**  - Data available but does not fill the criteria for classification  
 - Data required to make classification available  
 - Data Not Available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

| Ingredient     | Endpoint | Test Duration (hr) | Species                       | Value            | Source |
|----------------|----------|--------------------|-------------------------------|------------------|--------|
| sucrose        | EC50     | 384                | Crustacea                     | 1971.62453mg/L   | 3      |
| sucrose        | EC50     | 96                 | Algae or other aquatic plants | 286533.52249mg/L | 3      |
| sucrose        | LC50     | 96                 | Fish                          | 113.3799mg/L     | 3      |
| sodium citrate | EC50     | 96                 | Algae or other aquatic plants | >18000-32000mg/L | 1      |
| sodium citrate | EC50     | 48                 | Crustacea                     | >50mg/L          | 2      |
| sodium citrate | EC50     | 48                 | Crustacea                     | 736mg/L          | 2      |
| sodium citrate | NOEC     | 192                | Algae or other aquatic plants | 425mg/L          | 2      |
| water          | EC50     | 384                | Crustacea                     | 199.179mg/L      | 3      |
| water          | EC50     | 96                 | Algae or other aquatic plants | 8768.874mg/L     | 3      |
| water          | LC50     | 96                 | Fish                          | 897.520mg/L      | 3      |

**Legend:**

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - 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

**DO NOT** discharge into sewer or waterways.

## Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|-------------------------|------------------|
| sucrose    | LOW                     | LOW              |
| water      | LOW                     | LOW              |

## Bioaccumulative potential

| Ingredient | Bioaccumulation      |
|------------|----------------------|
| sucrose    | LOW (LogKOW = -3.7)  |
| water      | LOW (LogKOW = -1.38) |

## Mobility in soil

| Ingredient | Mobility |
|------------|----------|
|------------|----------|

Continued...

## NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES

|         |                  |
|---------|------------------|
| sucrose | LOW (KOC = 10)   |
| water   | LOW (KOC = 14.3) |

## SECTION 13 DISPOSAL CONSIDERATIONS

## Waste treatment methods

|                              |  |
|------------------------------|--|
| Product / Packaging disposal | <ul style="list-style-type: none"> <li>▶ <b>DO NOT</b> allow wash water from cleaning or process equipment to enter drains.</li> <li>▶ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▶ Where in doubt contact the responsible authority.</li> <li>▶ Recycle wherever possible.</li> <li>▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>▶ Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).</li> <li>▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.</li> </ul> |
|------------------------------|--|

## SECTION 14 TRANSPORT INFORMATION

## Labels Required

|                  |                |
|------------------|----------------|
| Marine Pollutant | NO             |
| HAZCHEM          | Not Applicable |

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea 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

## SECTION 15 REGULATORY INFORMATION

## Safety, health and environmental regulations / legislation specific for the substance or mixture

## SUCROSE(57-50-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

|                              |   |
|------------------------------|---|
| Australia Exposure Standards | Australia Inventory of Chemical Substances (AICS) |
|------------------------------|---|

## SODIUM CITRATE(68-04-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

|   |
|---|
| Australia Inventory of Chemical Substances (AICS) |
|---|

## WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

|   |
|---|
| Australia Inventory of Chemical Substances (AICS) |
|---|

| National Inventory            | Status  |
|-------------------------------|---|
| Australia - AICS              | Y   |
| Canada - DSL                  | Y   |
| Canada - NDSL                 | N (sucrose; water; sodium citrate)  |
| China - IECSC                 | Y   |
| Europe - EINEC / ELINCS / NLP | Y   |
| Japan - ENCS                  | N (sucrose; water)  |
| Korea - KECI                  | Y   |
| New Zealand - NZIoC           | Y   |
| Philippines - PICCS           | Y   |
| USA - TSCA                    | Y   |
| <b>Legend:</b>                | Y = All ingredients are on the inventory<br>N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets) |

## SECTION 16 OTHER INFORMATION

## Other information

## Ingredients with multiple cas numbers

| Name           | CAS No                                     |
|----------------|--|
| sodium citrate | 114456-61-0, 6132-04-3, 68-04-2, 6858-44-2 |

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.

A list of reference resources used to assist the committee may be found at:

**NEUTRADEX MILD DIURETIC AND URINARY BUFFER FOR HORSES**

[www.chemwatch.net](http://www.chemwatch.net)

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  
STEL: Short Term Exposure Limit  
TEEL: Temporary Emergency Exposure Limit,  
IDLH: Immediately Dangerous to Life or Health Concentrations  
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

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH.

TEL (+61 3) 9572 4700.