1 Identification of the substance and supplier—

Chlorhexidine Pre Op Solution

Vet Hygiene Solutions 14 Great South Road Pokeno Auckland

National Poisons Centre 0800 764766 (0800 POISON)

2 Hazards identification—

Danger

- 3.1B Highly flammable liquid and vapour
- 6.3B Causes mild skin irritation
- 6.4A Causes eye irritation.
- 9.1B Toxic to aquatic life with long lasting effects.

3 Composition/information on ingredients—

| Substance | CAS Number | % |
|---------------------------|------------|------|
| Ethanol | 64-17-5 | >60% |
| Chlorhexidine digluconate | 18472-51-0 | 5% |
| Non hazardous ingredients | | >20% |

4 First aid measures—

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention. If skin irritation occurs: Get medical advice/ attention

5 Fire fighting measures—

Extinguishing Media

carbon dioxide, dry powder, alcohol resistant foam.

Fire/Explosion Hazards

Highly flammable vapour and liquid, Avoid mixing with strong acids, acid chlorides, acid anhydrides and oxidizers

6 Accidental release measures—

Remove all ignition sources. No smoking

When handling bulk quantities of product

Wear PVC gloves & chemical goggles.

Use absorbent material to absorb the spill. Use only non-sparking tools.

Take precautionary measures against static discharge. Collect spillage. **Avoid release to the environment.** Take off contaminated clothing and wash before re-use. Wash hands and face thoroughly after handling.

7 Handling and storage—

Keep container tightly closed when not in use. Store in a cool well-ventilated place. Keep away from heat, sparks, open flames & hot surfaces .See also "accidental release measures."

8 Exposure controls/personal protection—

TWA TWA STEL ppm mg/kg ppm 1000 1880 —

Workplace Exposure Standard (Ethanol)

Use in well ventilated areas

When used as directed no PPE is required

9 Physical and chemical properties—

Appearance: Water thin liquid

| Appearance. Water timi ii | Appearance. Water triin iiquid | | | | |
|---------------------------|--------------------------------|--------------------------|--------------------|--|--|
| Odour | Characteristic | Upper Flammable limit | 19% | | |
| | odour | | | | |
| Odour threshold | Not available | Vapour pressure kPa | 5.81 @ 20 °C | | |
| рН | Not Applicable | Vapour Density | 1.59 (air=1) | | |
| Melting /freezing point | -117.3 ^⁰ C | Relative density | 0.825 | | |
| Initial Boiling point | 78 °C | Solubility | Miscible | | |
| Flash point | 13 °C cc | Partition coefficient n- | Not Available | | |
| | | octanol/water | | | |
| Evaporation Rate | Not Available | Auto-ignition | 392 ^⁰ C | | |
| | | temperature | | | |
| Flammability (solid, | Not Applicable | Decomposition | Not Available | | |
| gas) | | temperature | | | |
| Lower Flammable | 3.3% | Viscosity | Not Available | | |
| Limit | | _ | | | |

10 Stability and reactivity—

Product is stable

Avid mixing with strong acids, acid chlorides, acid anhydrides and oxidizer

11 Toxicological information—

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS Irritating to eyes. May causes mild skin irritation Vapours may cause drowsiness and dizziness.

TOXICITY

Oral (rat) LD50: 25,200 mg/kg (calculated mixture rules)

IRRITATION

Ethanol Eye (rabbit): 100 mg - Moderate

12 Ecological information—

Toxic to aquatic life with long lasting effects. No data on degradation and bioaccumulation for chlorhexidine digluconate.

13 Disposal considerations—

Unused product must be disposed of using a method that complies with local Trade Waste bylaws.

Empty product containers may be disposed of using a commercial waste collection service.

14 Transport information—

Classified as a Transport Dangerous Goods

UN 1170 ETHANOL SOLUTION, PG II,



Marine Pollutant

15 Regulatory information—

HSNO Classifications

3.1B Flammable Liquids: high hazard

6.4A Irritating to the eye

9.1D Harmful in the aquatic environment

Cleaning Products (Flammable) Group Standard 2006 HSNO Approval Number HSR002528

A Hazardous Atmosphere Zone required when more than 100 litres stored

A Hazardous Substance Location certificate may be required when more than 100 litres is stored.

An Approved Handler may be required when stored in quantities greater than 250litres

Health and Safety in Employment Act & Regulations

16 Other information—

Date of preparation 22 November 2011