

VETPAK SAFETY DATA SHEET

Section 1: Identification of the Substance or Mixture and of the Supplier

Product Name: Iodine Spray 2.5%

Recommended Use: As a general veterinary disinfectant.

Company Details: Vetpak Ltd.

Address: 150 Rickit Road, Te Awamutu.

Telephone Number: (07) 870 2024

Emergency Telephone Number: (07) 870 2024 8.00am to 5.00pm Monday to Friday except public holidays. National Poisons Centre, Department of Preventative and Social Medicine, University of Otago, P O Box 913, Dunedin, New Zealand. Phone (0800) 764-766 24 hours.

Date of Preparation: 21st Jan 2009

Section 2: Hazards Identification

Hazards Classification: Hazardous according to the criteria of of the New Zealand Hazardous Substances and New Organisms legislation.

3.1B: Highly flammable liquid and vapour.

6.3A: Causes skin irritation.

6.4A: Causes serious eye irritation.

6.5B: May cause an allergic skin reaction.

6.9B: May cause damage to the liver with repeated exposure.

9.1B: Toxic to aquatic life with long lasting effects.

Section 3: Composition / Information on Ingredients:

INGREDIENTS:

Pure Substance	CAS Number	Proportion
Iodine prills	7553-56-2	< 5.0%v/v
Potassium Iodide	7681-11-0	< 5.0%v/v
Ethanol	64-17-5	70.0%v/v
Water	7732-18-5	>25% v/v

Section 4: First Aid Measures:



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Description of necessary first Aid measures:

Swallowed: Do not induce vomiting. If victim is conscious and alert give 2 – 4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Skin: Flush skin with plenty of water, while removing contaminated clothing. Wash clothing before re-use.

Eye: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Inhaled: Remove from exposure and move to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Workplace Facilities: Eye bath and running water.

Notes for Medical Personnel: Treat symptomatically and supportively. Persons with skin or eye disorders or liver, kidney, chronic respiratory diseases may be at increased risk from exposure to this substance. Replace fluid and electrolytes.

Section 5: Fire Fighting Measures

Type of Hazard: Flammable liquid.

Fire Hazard Properties: Containers can build up pressure if exposed to heat and / or fire. Vapours may form an explosive mixture with air. Vapours can travel to a source of ignition and flash back. Will burn if involved in a fire. Can release vapours that form explosive mixtures at temperatures above the flash point. Containers may explode in the heat of a fire.

Flash point: 16.6°C.

Auto-ignition Temperature: 363°C.

Extinguishing Media & Methods: For small fires, use dry chemical, carbon dioxide water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do not use straight streams of water.

Recommended Protective Clothing: As in any fire, wear a self-contained breathing apparatus in pressure demand, MSHA / NIOSH (approved or equivalent), and full protective gear.

Section 6: Accidental Release Methods

Procedures to be covered: Shut off all possible sources of ignition. Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination, and inhalation of vapours. Contain. Do not allow chemical to enter confined spaces such as sewers due to explosion risk.

Small spill or leak (230 litres or less): Dilute with water and mop up, or absorb with an inert dry material (soil, sand or other inert material).

Major spills (> 230 litres): Clear area of personnel and move upwind. Alert fire brigade; explain location and nature of hazard. Ethyl Alcohol may be violently or explosively reactive. Wear breathing apparatus and protective clothing. Prevent from any means available, spillage from entering drains or water-courses. Consider evacuation. No smoking, naked lights or ignition sources. Increase ventilation. Stop leaks if safe to do so. Water vapour or fog may be used to disperse vapour. Contain spill with sand, earth or vermiculite. Use only spark free shovels and explosion proof equipment. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of sewers or waterways and or surrounding environment has occurred, notify local emergency services, local authorities, and the Regional Council.

Section 7: Handling and Storage



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Handling:

Handling Practices: Avoid breathing vapours or spray mists. Use only with adequate ventilation. Keep container closed. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion proof electrical (ventilating, lighting and material handling) equipment.

Storage:

Store Site Requirements: Store in a segregated and approved area. Keep container in a cool, well-ventilated area away from sunlight. Store away from oxidising agents, such as alkali metals, acids, acid chlorides, ammonia, and potassium tert-butoxide. In case of flexible tubing usage, check with manufacturer to find product compatibility. Keep container tightly closed and sealed until ready for use. Check regularly for leaks. Avoid all possible sources of ignition (spark or flame).

Packaging: Aluminium is not a suitable container for package.

Section 8: Exposure Controls / Personal Protection

Workplace Exposure Standards: Threshold Limit Value – Time weighted Average (TLV – TWA) 1000ppm 1880mg/m³ (Ethanol), 200ppm, 262mg/m³ (Methanol) (As published by New Zealand Occupational Safety and Health Service – OSH)

Odour Threshold 350ppm (Ethanol).

Engineering Controls: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing organic vapour respirator. Vapour heavier than air – prevent concentrations in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use. Earth all containers to reduce the possibility of sparks from static electricity.

Personal Protective Equipment (PPE): Wear appropriate clothing to prevent repeated or prolonged skin contact. Gloves made of butyl rubber, Nitrile plus PVC, or PVC. Where eye exposure is reasonably probable always wear approved chemical safety goggles or Safety Glasses with side shields. It would be advisable not to use contact lenses when working with this chemical as soft lenses may absorb irritants, and all lenses will concentrate vapours on the surface of the eye. If inhalation risk exists wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS1716.

Personal Hygiene: Do not eat, drink or smoke when handling this product.

Section 9: Physical and Chemical Properties

Physical State: Liquid.

Appearance: Brown liquid with iodine smell..

Boiling Point: Not known.

Vapour Pressure: Not applicable

Specific Gravity: 0.86.

Flash Point: Not known.

Flammability Limits: Not known.

Solubility in Water: Soluble.

Section 10: Stability and Reactivity



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Stability of the Substance: Product is stable under normal conditions of storage.

Conditions to avoid: Sparks, open flames, heat and other sources of ignition. Avoid electrostatic discharges.

Material to avoid: Reactive with oxidising agents, alkali metals, acids, acid chlorides, ammonia, and Potassium tert-butoxide. Aluminium containers should be avoided as aluminium alcoholates may be formed under certain conditions.

Hazardous decomposition Products: Not applicable because product is stable.

Hazardous polymerization: Does not occur.

Section 11: Toxicological Information

Data and interpretation: No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled and over exposure occurs are:

Acute Effects:

Swallowed: Swallowing can result in nausea, vomiting, dizziness, fatigue, headache and central nervous system depression. If the victim is uncoordinated there is a greater likelihood of vomit entering the lungs and causing subsequent complications.

Skin: Contact with skin will result in mild irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Eye: Is an eye irritant. HSNO classification, 6.4A – Eye Irritant.

Inhaled: Vapour may be an irritant to the mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness, fatigue and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can contribute to loss of coordination, impaired judgement and, if exposure is prolonged, unconsciousness.

Long Term Effects: Evidence from animal tests and studies on exposed humans indicate that repeated or prolonged exposure to this chemical could result in liver damage.

Acute Toxicity:

Acute oral toxicity (LD50); 7060 mg/kg (Rat) (Ethanol)

Acute toxicity of the vapour (LC50); 66,000ppm 4 hours (Rat) (Ethanol)

Acute oral toxicity (LD 50); 5628 mg/kg (Rat) (Methanol)

Acute dermal toxicity (LD50); 15,800 mg/kg (Rabbit) (Methanol)

Acute toxicity of the vapour (LC50); 64,000ppm 4 hours (Rat) (Methanol)

Chronic Toxicity:

Carcinogenic Effects: There is no clear evidence that ethanol is carcinogenic to laboratory animals. It is however a tumour promoter.

Mutagenic Effects: Ethanol itself is not mutagenic, but its metabolite acetaldehyde is mutagenic.

Developmental Effects: Oral exposure to ethanol produces malformations and developmental toxicity in rats and mice at maternally toxic doses. Ethanol is equally foetotoxic in experimental animals by inhalation or oral exposure.

Section 12: Ecological Information

Potential Environmental Considerations: Ethanol is harmful to aquatic life. Ethanol has a low potential for bioaccumulation and is substantially biodegradable in water.



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Ecotoxicity in water:

(LC50) 13,000mg/l 96 hours (Trout)

(LC50) 15,300 mg/L 96 hours (Fathead Minnow)

(LC50) 250ppm 8 hours (Goldfish) (Ethanol)

HSNO Classification 9.1D – harmful to aquatic life.

Products of Degradation: Formaldehyde and Acetic Acid. The products of degradation are more toxic than ethanol.

Environmental risk phrases:

Avoid contamination of waterways.

Section 13: Disposal Considerations

Disposal Information: Can be disposed of in Sewerage treatment facility provided it is first diluted with sufficient water to bring the mixture below the flammable threshold (less than 3% ethanol by volume) i.e. to raise the flashpoint above 93°C. This requirement is included to ensure that flammable substances do not collect in pockets of sewerage collection system with resultant fires or vapour explosions. Large volumes may be suitable for re-distillation by solvent contractors.

Container Disposal: Empty containers may contain hazardous residues. Labels should not be removed from containers until they have been appropriately cleaned. Do not cut, puncture or weld on or near to the containers.

Containers should be cleaned by approved methods and then re-used or disposed of by landfill. After cleaning, all existing labels should be removed. Do not incinerate closed containers.

Section 14: Transport Information

UN-No: Not allocated.

Dangerous Goods Class: 2(Y)E

Packing Group: II

Proper Shipping Name: None allocated.

Segregation: Not to be loaded with explosives (Class 1), Flammable gasses (Class 2.1). If both are in bulk, toxic gasses (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.

Ethanol is classified as Dangerous Goods and must comply with the Land Transport Rule: Dangerous Goods 2005, and NZS 5433: 1999 Transport of Dangerous Goods on Land.

Marine: Classified as Dangerous Goods by International Marine Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport: Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA). Dangerous Goods Regulations for transport by air.

Section 15: Regulatory Information

Regulatory status: Hazardous substance. ERMA Approval Code HSR001996.

Section 16: Other Information

Additional Information: National Poisons Centre, Department of Preventative and Social Medicine, University of Otago, P O Box 913, Dunedin, New Zealand. Phone (0800) 764-766 24 hours.



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1. The above information has been compiled on the basis of good faith, and our experience from the available technical knowledge and data for this product.
 2. Where health or safety data given discloses a risk to the user or environment, it is the responsibility of the Purchaser to pass on that information to employees or those who may be using the product, ensuring that adequate safety procedures are used.
 3. No responsibility can be accepted for the wrongful or misinterpretation of this data.
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