

SAFETY DATA SHEET

Section 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IODINE TINCTURE 10%
UN NUMBER:
PRODUCT USE: As a general veterinary disinfectant.
SUPPLIER: Contract Packaging and Storage Limited
 44 Aerodrome Road
 PO Box 4676
 Mount Maunganui 3149
Telephone: +64 7 575 8853

24 HOUR EMERGENCY CONTACT: 0800 764 766 (National Poisons Centre)

DATE OF PREPARATION: 29 September 2019 Revision 1

Section 2: HAZARDS IDENTIFICATION

TATEMENT OF HAZARDOUS NATURE

This product is HAZARDOUS IN THIS FORM AND AT THIS STRENGTH.

Hazardous substances Class 3, Packing Group II
 Handle correctly and as directed by this SDS.

HAZARD LABELLING WARNING



HAZARD CLASSIFICATION AND STATEMENTS

HSNO	HSNO	GHS	Signal Word	GHS Hazard Statement
Ethanol >50% in a non hazardous diluent HSR006424				
3.1B	Flammable liquid – high hazard	Category 2	Danger	H225 Highly flammable liquid and vapour
6.4A	Irritating to the eye	Category 2	Warning	H319 Causes serious eye irritation
Potassium Iodide >1 – 3% in a non hazardous diluent HSR006623				
6.5B	Contact Sensitiser	Category 1	Warning	H317 May cause an allergic skin reaction
Iodine >1 – 3% in a non hazardous diluent HSR006447				
6.3A	Irritating to the skin	Category 2	Warning	H315 Causes skin irritation
6.4A	Irritating to the eye	Category 2	Warning	H319 Causes serious eye irritation
6.5B	Contact Sensitiser	Category 1	Warning	H317 May cause an allergic skin reaction
6.9B	Harmful to human target organs or systems	Category 2	Warning	H371 May cause damage to organs through dermal exposure

GHS Prevention Statements

- P103: Read label before use
- P210: Keep away from heat/hot surfaces/sparks/open flames/other ignition sources. No smoking.
- P233: Keep container tightly closed
- P240: Ground/bond container and receiving equipment.
- P241: Use explosion-proof electrical/ventilation/lighting
- P242 & P243: Use only non-sparking tools & Take precautionary measures against static discharge
- P261: Do not breathe dust/fume/gas/mist/vapours/spray
- P264: Wash hands thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P272: Contaminated work clothing should not be allowed out of the workplace
- P280: Wear protective gloves/clothing and eye/face protection

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Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

COMPOSITION

NAME	CAS NUMBER	% w/w	HAZARDOUS
Ethanol	64-17-5	>60	Yes 3.1B; 6.4A
Water	7732-18-5	30-60	No
Potassium Iodide	7681-11-0	<10	Yes 6.5B; 9.1B
Iodine	7553-56-2	<10	Yes 6.1D; 6.5B; 6.9B; 8.2C; 8.3A; 9.1A; 9.3C

Section 4: 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.

EYE

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

SKIN

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

INHALATION

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

Section 5: FIRE FIGHTING MEASURES

FIRE HAZARD PROPERTIES

Highly flammable liquid. Containers can build up pressure and may explode 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.

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 MEASURES

EMERGENCY PROCEDURES

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

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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

HANDLING

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 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). Aluminium is not a suitable container for package.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

Threshold Limit Value – Time weighted Average (TLV – TWA) 1000ppm 1880mg/m³ (Ethanol), (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.

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Brown liquid

PHYSICAL PROPERTIES

PROPERTY	VALUE
State	Brown liquid
Odour	Iodine
Molecular Weight	
Melting Range (°C)	
Boiling Range (°C)	
Solubility in water (g/L, 20°C)	Totally soluble
pH (saturated solution)	
pH (as supplied)	
Specific Gravity (water = 1)	0.86
Relative Density (23°C)	
Volatile Component	
Relative Vapour Density (air = 1)	
Vapour Pressure (kPa)	
Autoignition Temp (°C)	363
Flash Point (°C)	<23
Lower Explosive Limit (%)	
Upper Explosive Limit (%)	
Decomposition Temp (°C)	
Viscosity	
Evaporation Rate	

Section 10: CHEMICAL STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable under normal conditions of storage.

CONDITIONS TO AVOID

Sparks, open flames, heat and other sources of ignition. Avoid electrostatic discharges.

INCOMPATIBLE MATERIALS

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

None

HAZARDOUS REACTIONS

Will not occur.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

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

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

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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.

EYE

Is an eye irritant. HSN0 classification, 6.4A – Eye Irritant.

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.

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.

CHRONIC EFFECTS

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

Irritation/Corrosion: Prolonged exposure to skin may cause irritation.

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.

Reproductive or 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

ECOTOXICITY

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

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

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

(LC50) 250ppm 8 hours (Goldfish)

Chronic: No data

Phytotoxicity:

Persistence and Degradability: Readily biodegradable.

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

Toxicity of the Products of Biodegradation:

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.

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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 approved landfill. After cleaning, all existing labels should be removed. Do not incinerate closed containers.

Section 14: TRANSPORT INFORMATION

Hazard Class: 3.1B; 6.1E; 6.4A; 6.8B; 6.9B

UN Number: 1170 (Ethanol).

Packing Group: II

Hazchem Code: 2(Y)E

Land Transport: 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.

Sea Transport: 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.

Other Information:

Section 15: REGULATORY INFORMATION

HSNO Approval Number: N/A

HSNO Classifications:

3.1B (Highly Flammable Liquid and Vapour)

6.1E (May be Harmful if Swallowed)

6.4A (Causes Eye Irritation)

6.8B (Suspected of Damaging Fertility or the Unborn Child)

6.9B (Harmful to human target organs or systems)

HSNO Controls:

Trigger quantities for this substance by itself in a place:

- **Location Test Certificate:**
 - 50 litres (open container)
 - 100 litres (closed container > 5L)
 - 250 litres (closed container ≤ 5L)
- **Hazardous Atmosphere Zone:**
 - 1 litre (open continuously)
 - 5 litres (open occasionally)
 - 25 litres (decanting)
 - 100 litres (closed containers)

- **Signage:** 250 litres

- **Emergency Plan:** 1000 litres

Tracking: Not applicable

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Section 16: OTHER INFORMATION

Interpretation and Abbreviations

Controls applying to a substance:

- * denotes that changes have been made to these controls, further information on these changes is located in the transfer notice for that substance,
- (R) abbreviation for the term Regulation of the Hazardous Substances regulations

AICS – Australian Inventory of Chemical Substances

AOX – Absorbable organic halogens.

APF – Assigned Protection Factor.

BOD – Biochemical Oxygen Demand China

COD – Chemical Oxygen Demand

DSL – Canadian Domestic Substances List.

EINECS – European Inventory of Existing Commercial Chemical Substances.

ENCS – Japanese Existing and New Chemical substances.

IARC – International Agency for Research on Cancer.

IDLH – Immediately Dangerous to Life or Health Concentrations.

ISHL – Japanese Industrial Safety and Health Law List of Chemicals.

LOEL – Lowest Observed Effect Level.

LD_{LO} – Lethal Dose Low (the lowest dosage per unit of bodyweight of a substance known to have resulted in fatality in a particular animal species).

MAK – Maximum workplace concentration in the workplace air that generally does not have known adverse effects on the health of the employee nor cause unreasonable annoyance when a person is repeatedly exposed during long periods, usually 8 hours daily, 40hour working week).

NOAA – National Oceanic and Atmospheric Administration.

NOEC – No Observed Effect Concentration.

NTP – National Toxicology Program.

NZIoC – New Zealand Inventory of Chemicals.

OECD HPV – The Organisation for Economic Co-operation and Development High Product Volume Chemicals.

PEL – Permissible exposure limit.

PPE – Personal Protective Equipment.

Prop 65 – California Proposition 65 List of Chemicals.

RTECS – Registry of Toxic Effects of Chemical substances

STEL – Short term exposure limit.

TOC – Total Organic Carbon.

TSCA – US Toxic Substances Control Act Existing Chemicals.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

VOC – Volatile Organic Compounds.

Date of Preparation/Review: 26 September 2019

Sources of key data used to compile the datasheet:

Manufacturers SDS

NZ EPA CCID

Health and Safety at Work (Hazardous Substances) Regulations 2017

Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

Hazardous Substances (Safety Data Sheets Notice 2017

Hazardous Substances (Classification) Notice 2017

Labelling of Hazardous Substances Technical Guide 2012

DISCLAIMER

The information contained in this safety data sheet was obtained from current and reliable sources. This data is supplied without warranty, expressed or implied, regarding its correctness and accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.

END OF SDS