

# VETPAK SAFETY DATA SHEET

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

**Product Name: Formalin 10%**

**Recommended Use:** For fixation of veterinary histological samples.

**Company Details:** Vetpak Ltd.

**Address:** 249 Bruce Berquist Dr, Te Awamutu 3800.

**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:** 9<sup>th</sup> July 2019

## Section 2: Hazards Identification

### STATEMENT OF HAZARDOUS NATURE

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

Handle correctly and as directed by this SDS.

### HAZARD LABELLING WARNING



### HAZARD CLASSIFICATION AND STATEMENTS

HSNO	HSNO	GHS	Signal Word	GHS Hazard Statement
6.1E	Acute toxicity (All)	Category 5	Warning	H303; H313; H333 May be harmful if swallowed; in contact with skin; if inhaled
6.3A	Skin corrosion / irritation	Category 2	Warning	H315 Causes skin irritation
6.4A	Serious eye damage/ eye irritation	Category 2	Warning	H319 Causes serious eye irritation
6.5B	Skin sensitisation	Category 1	Warning	H317 May cause an allergic skin reaction
6.6B	Germ cell mutagenicity	Category 2	Warning	H341 Suspected of causing genetic defects
6.7A	Carcinogenicity	Category 1	Danger	H350 May cause cancer
6.9B	Specific target organ toxicity	Category 2	Warning	H371 May cause damage to organs through dermal exposure
9.2B	Soil ecotoxic			H422 Toxic to soil environment

### GHS Precautionary Statements

- P102: Keep out of reach of children  
P103 & P201: Read label before use; Obtain special instructions before use  
P202: Do not handle until all safety precautions have been read and understood  
P260 & P261: Do not breathe vapours; Avoid breathing vapours  
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  
P273: Avoid release to the environment  
P280 & P281: Wear protective gloves and eye/face protection; Use personal protective equipment  
P284: Wear respiratory protection. (50ppm) Chemical cartridge respirator with organic vapour cartridge with full facepiece. See section 8 for more details.

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## Section 3: Composition / Information on Ingredients:

### COMPOSITION

Ingredient	CAS Number	% w/w	HAZARDOUS
Water (micro-filtered)	7732-18-5	>60	No
Formaldehyde	50-00-0	<10	Yes 6.1E; 6.3A; 6.4A; 6.5B; 6.6B; 6.7A; 6.9B; 9.2B
Methanol	67-56-1	<10	Yes 6.1E; 6.8B; 6.9B

## Section 4: First Aid Measures:

### Description of necessary first Aid measures:

**Swallowed:** Call the National Poison Centre (0800) 764-766 or doctor / physician; AND rinse mouth. Do NOT induce vomiting.

**Skin:** Gently wash with plenty of soap and water. Immediately remove/take off all contaminated clothing.

**Eye:** Rinse cautiously with water for at least 20 minutes. Remove contact lenses if present and easy to do. Do not rub the eye. Cover with sterile dressing. Seek medical attention immediately.

**Inhaled:** Remove to fresh air and keep at rest in a position comfortable for breathing.

**Workplace Facilities:** Clean running water.

**Notes for Medical Personnel:** Treat symptomatically.

## Section 5: Fire Fighting Measures

**Type of Hazard:** Decomposes on heat emitting toxic fumes.

**Fire Hazard Properties:** May flash or add to fire.

**Extinguishing Media & Methods:** Water fog (or if unavailable fine water spray), foam, dry chemical powder or carbon dioxide.

**Recommended Protective Clothing:** Fire fighters to wear self-contained breathing apparatus if risk of exposure or of decomposition.

## Section 6: Accidental Release Methods

**Procedures to be covered:** Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Contain and absorb with dry sand or other inorganic material, do not use sawdust or paper. Recover in HDPE container and dispose as Hazardous Waste in accordance with local regulations. Avoid contamination of waterways.

## Section 7: Handling and Storage

**Handling Practices:** Keep away from ignition sources. Avoid spilling, skin and eye contact. Wear protective clothing. Avoid breathing vapours. Use approved respirator if air contamination is above acceptable level.

**Store Site Requirements:** Do not store with Hazard Classes 1, 5, 7 food or food containers. Ensure storage area is well ventilated. Store out of reach of children.

**Packaging:** Store tightly closed, upright and in the original, labelled container.

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## Section 8: Exposure Controls / Personal Protection

**Workplace Exposure Standards:** TWA 0.016ppm – product is mainly used outside.

**Engineering Controls:** Use with adequate ventilation – avoid creation and inhalation of aerosols.

**Personal Protective Equipment (PPE):** Wear full protective clothing. Wear trousers outside boots. PVC gloves and apron. Suitable respiratory and eye protection should also be worn. Safety glasses.



**Respirator selection:** (50ppm) chemical cartridge respirator with organic vapour cartridge with full facepiece; Gas mask with organic vapour canister (chin-style or front-or back-mounted canister); supplied air respirator with full facepiece, helmet, or hood; self-contained breathing apparatus with full facepiece; (100ppm): Type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous-flow mode; (escape): Gas mask with organic vapour canister (chin-style or front-or back-mounted canister); self contained breathing apparatus.

**General hygiene:** Do not eat, drink or smoke when handling this product.

## Section 9: Physical and Chemical Properties

**Appearance (physical state, colour etc.):** Clear liquid.

**Odour:** Pungent, irritating.

**pH:** 3.5

**Melting Point/Freezing Point (°C):**

**Boiling Point (°C):** approximately 101.

**Flash Point (°C):** 70.

**Flammability:**

**Lower Flammability/Explosive Limit:**

**Upper Flammability/Explosive Limit:**

**Auto-ignition Temperature (°C):**

**Vapour Pressure:** 55 mm Hg at 37 C.

**Vapour Density:**

**Relative Density:**

**Solubility in Water:** Totally soluble.

**Specific Gravity:** 1.009 (water = 1)

**Viscosity:**

## Section 10: Stability and Reactivity

**Stability of the Substance:** Stable. Strong reducing agent, especially in alkaline solution. Combustible. Light and air sensitive. Polymerises spontaneously.

**Material to avoid:** Strong bases, strong acids, strong oxidising agents, aniline, phenol, isocyanates and anhydrides.

**Hazardous decomposition products:** Decomposition may yield chlorine dioxide or chlorine.

**Hazardous reactions:** Will occur.

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## Section 11: Toxicological Information

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**General:** Damaging to tissue. Carcinogen, sensitiser. Dangerous if swallowed, inhaled, gets in the eyes, or absorbed through the skin.

**Swallowed:** Burns in / around the mouth and digestive tract. (rat) LD<sup>50</sup> 100mg/Kg (Formaldehyde >25%)

**Skin:** Irritant. Rapidly absorbed through skin. (rabbit) LD<sup>50</sup> 270mg / Kg. (Formaldehyde >25%)

**Eye:** Strong irritant. Intense pain in the eye. Tightly closed. Reddened, swollen or watering excessively. Can't stand light.

**Inhaled:** Very destructive of mucous membranes and upper respiratory tract. Avoid breathing fumes or creating aerosols or mists. (human) TCL<sub>0</sub> 17mg/m<sup>3</sup>/30m. (rat) LC<sub>50</sub> 203 mg/m<sup>3</sup> (Formaldehyde >25%)

**Acute Health Effects:** As above

**Chronic Health Effects:** As above

**Toxicity:** As above

**Irritation/Corrosion:** Strong irritant. Damaging to tissue

**Carcinogenic Effects:** May cause cancer

**Mutagenic Effects:** Suspected of causing genetic defects

**Reproductive or developmental effects:** May cause damage through dermal exposure

**Aspiration hazard:** Harmful if inhaled

**Specific Target Organ Toxicity:** May cause damage through dermal exposure

**Sensitisation (respiratory/contact):** Harmful if inhaled or if in contact with skin

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## Section 12: Ecological Information

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**Ecotoxicity:** Harmful to aquatic life. Avoid contamination of waterways.

Ecotoxic in the soil environment. Contain and recover spills in HDPE containers

Harmful to terrestrial vertebrates. Secure from ingestion by animals.

**Ecotoxicity Data:** Formaldehyde LC<sup>50</sup> (rainbow trout) 118ul / L / 96hr flow-through bioassay.

Oral (rat) LD<sup>50</sup> 100 mg/Kg. (Formaldehyde >25%)

**Chronic:** No Data

**Phytotoxicity:** No Data

**Persistence and Degradability:** No Data

**Mobility:** No Data

**Bioaccumulation:** No Data

**BOD and COD:** No Data

**Products of Biodegradation:** No Data

**Toxicity of the Products of Biodegradation:** No Data

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## Section 13: Disposal Considerations

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**Disposal Information:** Triple rinse containers when empty, remove labels, crush and dispose of in an approved disposal facilities in accordance with all local regulations. Keep records of date, time, quantity and location of disposal, name and address of user.

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## Section 14: Transport Information

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**Hazard Class:** 6.1E; 6.3A; 6.4A; 6.5B; 6.6B; 6.7A; 6.9B; 9.2B

**UN Number:** None. (2209 Formaldehyde >25%)

**Packing Group:** III

**Hazchem Code:** 2Z

**Land Transport:** Check regulations

**Sea Transport:** Check regulations

**Air Transport:** Check regulations

**Other Information:** Don't transport with Hazard Classes 1, 5, 7, food or food containers. Transport upright in the original container with the lid tightly closed. Avoid spillage and any release into the environment.

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## Section 15: Regulatory Information

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**Regulatory status:**

**HSNO Code:** HSR001584

**Substance name:** Formaldehyde solution 4% with 1% methanol.

**HSNO Controls:**

Veterinarians holding a current annual retention certificate deemed to be approved handlers for storing or using this substance other than when it is being stored for re-sale.

A record of each application of the product must be kept in accordance with section 13.3 of the Health & Safety at Work (Hazardous Substances) Regulations 2017. (Class 6.7A substance)

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## Section 16: Other Information

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### 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.

LC<sup>50</sup> – Lethal concentration sufficient to kill 50 percent of the test population within a certain time

LD<sup>50</sup> – Lethal Dose sufficient to kill 50 percent of the test population within a certain time

LD<sub>Lo</sub> – 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.

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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.  
TC<sup>LO</sup> – Toxic concentration low (the lowest concentration of a substance known to have resulted in fatality in a particular animal species)  
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:** 9 July 2019

**Sources of key data used to compile the datasheet:**

Manufacturers SDS  
NZ EPA CCID

**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**