

Version 1.1

Issue date 03/09/2024

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Identifier

Product Name	Formalin 10%
Other Names	Laboratory Reagent
Proper Shipping Name	Formaldehyde, >25% aqueous solution, with ≤ 10% methanol
Other means of Identification	None

Relevant identified uses of the substance or mixture

Relevant identified uses	For fixation of veterinary histological samples. Footrot treatment, preservative and biocide
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Details of the supplier of the safety data sheet

Registered company name	Vetpak Limited
Address	249 Bruce Berquist Dr, Te Awamutu 3800.
Telephone	(07) 870 2024
Website	www.vetpak.co.nz
Email	sales@vetpak.co.nz

Emergency telephone numbers

Association/ Organisation	New Zealand National Poison information centre
Emergency telephone number	0800 764 766 (07) 870 2024 Vetpak. 8.00am to 5.00pm Monday to Friday except public holidays.
Other emergency telephone numbers	New Zealand emergency services 111


SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification:

Classed as a dangerous good for transport and logistics

Hazardous according to the criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS)

Label pictograms

GHS label elements	
Signal Word	DANGER

Hazard statements

HSNO	Hazard Code	GHS Category	Hazard Statement
6.1B	H 330	Category 2	Fatal if inhaled
6.1C (dermal)	H 301	Category 3	Toxic if swallowed
6.1C (oral)	H 311	Category 3	Toxic in contact with skin
6.5B	H 317	Category 1	May cause an allergic skin reaction
6.6B	H 341	Category 1	Suspected of causing genetic defects
6,7A	H 350	Category 1	May cause cancer
6.9B	H 373	Category 2	May cause damage to liver and kidneys
8.2C	H 314	Category 1C	Cause severe skin burns
8.3A	H 318	Category 1	Causes eye damage

Precautionary statements prevention

P102	Keep out of the reach of children
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces or smoking
P260	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
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/eye protection/ face protection
P284	Wear respiratory protection. (50ppm) Chemical cartridge respirator with organic vapour cartridge with full face mask.

Precautionary statement responses

P301 + P330 + P331	If SWALLOWED rinse mouth. DO NOT induce vomiting
P303 + P361 + P353	IF ON SKIN Remove / Take off immediately all contaminated clothing, rinse skin with water
P363	Wash contaminated clothing before reuse.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poisons centre or doctor
P320	< No specific treatment or antidote available >
P308 + P313	If skin irritation occurs: Get medical advice/ attention.

Precautionary statement storage

P403 + P233 + P235	Store in a well-ventilated place. Keep container tightly closed. Keep cool
P405	Store locked up

Precautionary statement disposal

P501	Disposal should be through a suitably qualified contractor following the EPA guidelines
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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

CAS Number	% (weight)	Name
50 – 00 – 0	< 10%	Formaldehyde
67 – 56 – 1	< 10%	Methanol
7732 – 18 – 5	To 100%	Water

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Eye contact	<p>If this product comes in contact with eyes</p> <ul style="list-style-type: none">➤ Flush with plenty of water for 20 minutes, holding eyelids open if necessary.➤ Remove contact lenses if present and easy to do.➤ Seek medical advice/attention.➤ Continue flushing eyes until told to stop by a medical professional
Skin contact	<ul style="list-style-type: none">➤ Remove contaminated clothing and wash before reuse.➤ Wash affected area thoroughly with soap and water.➤ Seek medical advice/attention.
Inhalation	<ul style="list-style-type: none">➤ Remove patient to fresh air.➤ Inhalation of formaldehyde may be fatal with no antidote.➤ If breathing is shallow or has stopped ensure airway is clear and apply resuscitation.➤ Seek medical attention immediately
Ingestion	<ul style="list-style-type: none">➤ If swallowed DO NOT induce vomiting rinse mouth. Give small quantities of water➤ Never give anything by mouth to an unconscious person.➤ Seek medical attention immediately
Advice to the doctor	<p>Show this safety data sheet (SDS) to the doctor in attendance. Treat symptomatically. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves</p>

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media	<ul style="list-style-type: none">➤ Use fire media suitable for the surrounding area➤ Water spray➤ Fog➤ Alcohol resistant foam➤ Carbon dioxide➤ Dry powder
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Special hazards arising from the substrate or mixture

Fire incompatibility	This is considered a flammable product
Hazards from combustion	Decomposes on heating emitting toxic fumes

Advice for fire fighters

Fire fighting	<ul style="list-style-type: none">➤ Wear breathing apparatus plus protective gloves in the event of a fire.➤ Prevent, by any means available, spillage from entering drains or water courses.➤ Fire water may contain toxic compounds➤ DO NOT approach containers suspected to be hot.➤ Equipment should be thoroughly decontaminated after use.
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Fire/explosion hazard	➤ Flammable
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SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	<ul style="list-style-type: none"> ➤ Clear area of all unprotected personnel. ➤ Keep unnecessary and unprotected personnel from entering area. ➤ Remove any sources of ignition. ➤ Avoid contact with skin and eyes. ➤ Avoid breathing mist/vapour/spray. ➤ Avoid release to the environment. Increase ventilation if spill area is inadequately ventilated.
Protective equipment	<ul style="list-style-type: none"> ➤ Emergency responders must use personal protective equipment, including gloves, protective clothing, and safety glasses. ➤ Respiratory protection fitted with an organic vapour cartridge will be required.
Spill or leak procedures	<ul style="list-style-type: none"> ➤ Absorb the spill with suitable non-combustible absorbent material (sand, earth). ➤ Alternatively, a Formalin specific spill kit may be used for small spills. ➤ Using non sparking tools, collect into a properly labelled waste container for disposal.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> ➤ Avoid contact with skin and eyes. ➤ Do not breathe mists/vapours/spray. ➤ This product should be used outdoors. ➤ Do not eat, drink, or smoke when using this product. ➤ Remove contaminated clothing and wash hands and face before entering eating areas.
Other information	<ul style="list-style-type: none"> ➤ Keep out of reach of children. ➤ Store in a closed container in a well-ventilated area. ➤ Keep away from heat and direct sunlight. ➤ Store locked up.

Conditions for safe storage, including any incompatibilities

Site storage requirements	➤ Site Signage will be required when quantities exceed 250L.
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SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	<p>No Workplace Exposure Standards have been established for this product.</p> <p>Workplace Exposure Standards have been established for the following ingredients: Formaldehyde: TWA 0.3 ppm, STEL 0.6 ppm (carcinogen, dermal sensitiser) Methanol: TWA 200 ppm, 262 mg/m³. STEL 250 ppm, 328 mg/m³. (skin absorption).</p>
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Exposure controls

Appropriate engineering controls	<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 protection.</p> <p>The basic controls are:</p> <p>Process controls which involve changing the job activity or process to reduce risk</p> <p>Enclosure and or isolation source control keeping workers physically safe</p>
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	Ventilation that strategically adds and removes air in work environment. Ventilation can remove or dilute an air contaminant if designed properly
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ➤ Safety glasses with side shields ➤ Contact lenses may pose a special hazard soft contact lenses may absorb and concentrate materials. ➤ Medical personal should be trained and readily available in the event of chemical exposure; they should begin eye irrigation and remove contact lenses as soon as practicable. Lenses should be removed at the first sign of eye irritation ➤ Eyewash facilities and safety showers should be provided
Skin protection	Wear general protective gloves e.g. light weight rubber gloves
Hand / feet protection	As above for hands; wear appropriate footwear for the environment
Body protection	Overalls or PVC Aprons if available. PPE must be impervious to the substance
Other protection	<ul style="list-style-type: none"> ➤ Overalls ➤ PVC Aprons ➤ PVC protective gear ➤ Eyewash facilities ➤ Ensure there is ready access to a safety shower ➤ Non sparking footwear

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid	Relative density (Water = 1)	1.09
Odour	Pungent / Irritating	Specific gravity	Not available
Colour	Clear	Bulk density	Not available
pH	3.5	Vapour density	1.04 (formaldehyde)
Melting point (°C)	Not available	Auto ignition Temperature	300°C
Boiling point (°C)	101°C	Water Solubility	Soluble
Flash point (°C)	70°C	Explosive properties	Not available
Vapour pressure	55 mmHg @ 37.0 °C	Oxidising properties	Not available
Flammability	Not flammable	Volatile component (% vol)	Not available

SECTION 10 – STABILITY AND REACTIVITY

General Information	Stable under normal conditions
Chemical stability	Stable under normal storage and use conditions.
Conditions to avoid	Avoid flames, hot surfaces. Avoid formation of mists/vapours/spray.
Incompatible materials	Keep away from oxidisers, acids, alkalis, phenols and urea
Hazardous Polymerisation	May decompose on heating to form toxic fumes.



SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 oral > 50 - ≤ 300 mg/kg. LD50 dermal > 200 - ≤ 1000 mg/kg LC50 inhalation (vapours) > 0.5 - ≤ 2.0 mg/L
Inhalation	Fatal if inhaled. May cause lung damage
Ingestion	Toxic if swallowed. May also cause burns to mouth and throat which may affect breathing.
Skin	Toxic in contact with skin. Can be absorbed through the skin into the bloodstream. Skin corrosive. May cause skin burns.
Eyes	Eye corrosive. May cause corneal burns.
Carcinogenicity	Suspected of causing cancer.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Germ Cell Mutagenicity	Suspected Mutagen
STOT/RE	Causes damage to organs through prolonged or repeated exposure. Toxic effect to kidneys, liver, heart and pancreas.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	Not classified as ecotoxic in the aquatic or terrestrial environments
Persistence/Degradability	Not persistent
Bioaccumulation Potential	Not bioaccumulative
Environmental Impact	There are no ingredients with ecotoxic classifications

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	<ul style="list-style-type: none">➤ Dispose of product only by using according to label or at an approved landfill. Recycle where possible.➤ Do not contaminate bodies of water with chemical or empty container. Refer to the Local council bylaws and Land Waste Management Authority.➤ Avoid contamination of natural water supplies with the product or empty container
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SECTION 14 – TRANSPORT INFORMATION

Labels required

Marine Pollutant	No
HAZCHEM	Not classified as hazardous

Land transport (ADG) - Air transport (ICAO-IATA / DGR)

UN Number	2209
Packing group	III
UN proper shipping name	Formaldehyde solution
Environmental hazard	No data available
Transport hazard classes	No data available
Special precautions for user	Transport upright in the original container with the lid tightly closed. Avoid spillage and any release into the environment



Sea transport (IMDG / GGVSee)

UN Number	2209
Packing group	III
UN proper shipping name	Formaldehyde solution
Environmental hazard	No
Transport hazard classes	Class 8
Marine Pollutant	No

Transport in bulk according to Annex II of Marpol and the IBC Code - Not applicable

SECTION 15 – REGULATORY INFORMATION

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

GHS Codes	6.1B, 6.1C (dermal), 6.1C (oral), 6.5B, 6.6B, 6.7A, 6.9B, 8.2C, 8.3A
National Inventory	Status
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes - All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	Formaldehyde, >25% aqueous solution, with ≤ 10% methanol
Approval Code	HSR001518
Signage Trigger	250kg
Emergency response Trigger	100kg
Secondary containment	100kg
Certified Handler	Yes
Restriction of use	Yes
Fire Extinguishers	2 required for 500L or more

SECTION 16 – OTHER INFORMATION

While Vetpak Limited in good faith has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Vetpak Limited accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

New Zealand National Poison Information Centre: 0800 764 766
 New Zealand Emergency Services: 111
 Vetpak Limited: +64 7 870 2024

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 Government Industrial Hygiene
STEL	Short term exposure limit
TEEL	Temporary emergency exposure limit
IDLH	Immediate dangerous to life or health concentration
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

END OF SDS

