

Date of issue: 21 March 2024
Revised by: Simonne Moses - HSNO Consultant SDS No: 2

Safety Data Sheet

FIL FORMALIN

Classified as: Hazardous according to the EPA Hazardous Substances
(Hazard Classifications) Notice 2020.

Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: FIL Formalin

Supplier: FIL is a wholly owned subsidiary of
GEA Farm Technologies New Zealand Ltd

Address: 72 Portside Drive
Mt Maunganui 3116
New Zealand

Phone: +64 7 575 2162

Website: www.fil.co.nz

Recommended Use: Footrot treatment, preservative, biocide, restricted to workplaces only.

In Case of Emergency Contact:

CHEMCALL: 0800 CHEMCALL (243 622)

Section 2: HAZARDS IDENTIFICATION

Classified as a Dangerous Good for Transport.

Classified as hazardous according to criteria in the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

HSNO APPROVAL NUMBER: **HSR001518**

HSNO CLASSIFICATIONS: 3.1D – Flammable liquid (low hazard)
6.1B – Acutely toxic, inhalation
6.1C – Acutely toxic, dermal
6.1C – Acutely toxic, oral
6.5B – Skin sensitiser
6.6B – Suspected mutagen
6.7A – Known or presumed carcinogen
6.9B – Harmful to human target organs or systems, repeated exposure
8.2C – Skin corrosive
8.3A – Eye corrosive

GHS Classification: Flammable liquid – Category 4
Acute toxicity, inhalation – Category 2
Acute toxicity, dermal – Category 3
Acute toxicity, oral – Category 3
Skin sensitisation – Category 1
Germ cell mutagenicity – Category 2
Carcinogenicity – Category 1

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Specific target organ toxicant, repeated exposure – Category 2
 Skin corrosion – Category 1C
 Serious eye damage – Category 1

Hazard Statements:

- H227 Combustible liquid
- H301 Toxic if swallowed
- H311 Toxic in contact with skin
- H330 Fatal if inhaled
- H317 May cause an allergic skin reaction
- H341 Suspected of causing genetic defects
- H350 May cause cancer
- H373 May cause damage to organs (respiratory, metabolic, liver, kidneys) through prolonged or repeated exposure via ingestion or inhalation
- H314 Causes severe skin burns and eye damage

GHS Pictograms:



DANGER

PREVENTION STATEMENTS:

- P102 Keep out of 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 flames and hot surfaces. No smoking.
- P260 Do not breathe mists/vapours/spray.
- P264 Wash hands and exposed skin 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, protective clothing, and eye/face protection.
- P284 Wear respiratory protection fitted with an organic vapour cartridge.

RESPONSE STATEMENTS:

- P370+P378 IN case of fire: Use water fog or spray, foam, carbon dioxide, or dry powder for extinction.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 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 POISON CENTRE or doctor.
- P320 <No specific treatment or antidote available>
- P308+P313 If exposed or concerned: Get medical advice/attention.

STORAGE:

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

DISPOSAL:

P501 - In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Dispose of via an approved waste disposal contractor. Refer to Section 13 of the SDS.

Other information: Exposure to large quantities of formaldehyde fumes is known to cause respiratory distress, wheezing, coughing, and breathing difficulties. Upon further exposure at a later date, some people have experienced asthma like symptoms.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mixture: Formaldehyde solution.

Main Component	CAS Number	Concentration (%wt)
Formaldehyde	50-00-0	> 25%
Methanol	67-56-1	< 10%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4: FIRST AID MEASURES

Workplace Facilities Required: Eye wash and safety shower facilities should be provided.

If Inhaled: Remove to fresh air. Inhalation of formaldehyde may be fatal and there is no antidote. Seek immediate medical attention. If person stops breathing provide artificial respiration.

In Contact with Eye: Hold eyes open, flush continuously with water for at least 20 minutes. Seek immediate medical attention. Continue flushing until told to stop by a medical professional.

In Contact with Skin: Remove contaminated clothing. Wash skin with plenty of water. Seek immediate medical attention. Wash contaminated clothing before reuse.

If Swallowed: DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention. If vomiting occurs, keep head below hips to prevent aspiration to lungs.

Advice to Doctor: Treat symptomatically. Product is corrosive to skin and eyes and may cause breathing difficulties. Protect the airway. Ophthalmological opinion should be sought for burns to eyes.

Section 5: FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Combustible liquid. Keep away from flames, hot surfaces, sparks. Remove containers from path of fire if possible and safe to do so. Cool fire exposed containers with water spray.

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Suitable Extinguishing Media: Use water fog or spray, alcohol resistant foam, carbon dioxide, or dry powder.

Precautions in Connection with Fire: Decomposes on heating emitting toxic fumes.

Advice for firefighters: Wear full firefighting gear and self-contained breathing apparatus. Fire water may contain toxic compounds. Contain fire water.

Section 6: ACCIDENTAL RELEASE MEASURES

An emergency response plan meeting the requirements of Part 5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 is required when held in quantities greater than 100L.

Precautions: 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.

Suitable Protective Equipment: 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. 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.

Waste Disposal Methods: Dispose of as per Section 13.

Emergency preparation: Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: 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.

Storage: 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.

Site Storage Requirements: Site Signage will be required when quantities exceed 250L.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ: No Workplace Exposure Standards have been established for this product. 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).

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Engineering Controls: Eyewash facilities and safety showers should be provided in the work area where there is a risk of exposure to eyes and skin. Product should be used outdoors.

Personal Protective Equipment: Observe good chemical hygiene practice.

Hand protection: Wear protective gloves that are resistant to the product, e.g, PVC. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.

Skin and body protection: Wear suitable protective clothing. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.

Eye protection: Use safety glasses with side shields or chemical goggles to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.

Respiratory protection: Use a full-face respirator fitted with an organic vapour cartridge. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information: PPE selected must be impervious to the substance. Do not eat, smoke, or drink where material is handled, processed, or stored. Wash hands carefully before eating, drinking, or smoking. Handle in accordance with safe industrial hygiene practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Colour:	Clear
Odour:	Pungent/irritating	Odour Threshold:	Approx. 1 ppm
pH:	3.5	Solubility:	Fully miscible in water.
Melting/Freezing Point:	Not available	Boiling Point:	101°C
Flash Point:	70°C	Flammability:	Combustible
Lower/Upper Flammability Limits:	7-73% (formaldehyde)	Vapour Pressure:	55 mmHg @ 37°C
Vapour Density:	1.04 (formaldehyde)	Relative Density:	1.09
Partition Coefficient:	Not available	Auto-ignition Temperature;	300°C (formaldehyde)
Decomposition Temperature:	Not available	Kinematic Viscosity:	Not available
Particle Characteristics:	Not applicable		

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage and use conditions.

Reactivity: Reacts violently with perchloric acid. Non-hazardous polymerisation may occur at low temperatures forming paraformaldehyde.

Conditions to Avoid: Avoid flames, hot surfaces. Avoid formation of mists/vapours/spray.

Incompatibility: Keep away from oxidisers, acids, alkalis, phenols and urea.

Hazardous Decomposition: May decompose on heating to form toxic fumes.

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Section 11: TOXICOLOGICAL INFORMATION

Acute Exposure

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 Corrosion/Irritation: Toxic in contact with skin. Can be absorbed through the skin into the bloodstream. Skin corrosive. May cause skin burns.

Serious Eye Damage/Eye Irritation: Eye corrosive. May cause corneal burns.

Respiratory or Skin Sensitisation: Not known to cause respiratory sensitisation. Product is a contact sensitiser and may cause an allergic skin reaction.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive Toxicant Known carcinogen. Suspected mutagen. Not expected to be a reproductive toxicant.

Specific Target Organ Toxicity Single Exposure: No information available. No known effects.

Specific Target Organ Toxicity Repeated Exposure: Harmful to human target organs or systems including respiratory, metabolic, liver and kidneys, on prolonged or repeated exposures via ingestion and/or inhalation.

Aspiration Hazard: No information available. Not expected to be an aspiration hazard.

Toxicity data is based on hazardous ingredient information and information in the EPA Chemical Classification and Identification Database.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not classified as ecotoxic in the aquatic or terrestrial environments.

Persistence/degradability: Not persistent.

Bioaccumulation: Not bioaccumulative.

Mobility in soil: No information available.

Other adverse effects: None identified.

Ingredients with Ecotoxic classifications: There are no ingredients with ecotoxic classifications.

Ecotoxicity data is based on information in the EPA Chemical Classification and Identification Database.

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Section 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. Dispose of waste product via an approved waste disposal contractor.

Disposal of Packaging: Triple rinse packaging and add rinse solution to use solutions. Dispose of packaging via an approved waste disposal contractor.

Avoid contamination of natural water supplies with the product or empty container.

Section 14: TRANSPORT INFORMATION

Classified as a Dangerous Good for transport in accordance with NZS5433:2020, IMDG or IATA.



NZS5433:2020
 UN No: 2209
 Proper Shipping Name: Formaldehyde solution, > 25% formaldehyde, <10% methanol
 Class: 8
 Packing Group: III
 Environmental hazard: No
 Limited Quantity: 5L
 Hazchem Code: 2X

IMDG:
 UN No: 2209
 Proper Shipping Name: Formaldehyde solution, > 25% formaldehyde, <10% methanol
 Class: 8
 Packing Group: III
 Marine Pollutant: No
 EmS: F-A, S-B
 Limited Quantity: 5L

IATA:
 UN No: 2209
 Proper Shipping Name: Formaldehyde solution, > 25% formaldehyde, <10% methanol
 Class: 8
 Packing Group: III
 Environmental hazard: No

Ensure transportation methods prevent leakage from packages and collapsing loads.

Section 15: REGULATORY INFORMATION

Group Standard Allocation: Formaldehyde, >25% aqueous solution, with <10% methanol

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 Germ cell mutagenicity – Category 2
 Carcinogenicity – Category 1
 Specific target organ toxicant, repeated exposure – Category 2
 Skin corrosion – Category 1C
 Serious eye damage – Category 1

NZ Inventory of Chemicals: All ingredients are listed in the NZ Inventory of Chemicals.

This substance triggers:

Compliance Certificate	250L or 500L on a farm of not less than 4 hectares
Certified Handler	Yes
Emergency Response Plan	100L
Secondary Containment	100L
Signage	250L
Fire Extinguishers	2 required for 500L or more

This substance is required to be Tracked. This substance is restricted to workplaces only. Suppliers need to comply with the requirements of Clause 13 of the EPA Hazardous Substances (Hazardous Property Controls) Notice.

All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance.

Section 16: OTHER INFORMATION

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as a footrot treatment, preservative, or biocide. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued: 21/03/2024

Supersedes: 7/08/2019

Reason for Revision: 5-year review and update. Aquatic and Terrestrial toxicity classifications were removed when the approval was reissued in 2021.

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References:

EPA NZ Chemical Classification and Information Database
EPA Guide: Guide to Classifying Hazardous Substances in New Zealand, Version 1

Summary of Abbreviations: EPA – Environmental Protection Authority
GHS – Global Harmonisation System
CAS – Chemical Abstracts Service
TWA – Time Weighted Average

END OF SAFETY DATA SHEET