

Date of issue: 7 August 2019  
Revised by: Simonne Moses - HSNO Consultant SDS No: 1

## Safety Data Sheet FIL FORMALIN

Classified as: Hazardous according to the EPA Hazardous Substances  
(Minimum Degrees of Hazard) Notice 2017.

### 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](http://www.fil.co.nz)

**Recommended Use:** Footrot treatment, preservative, biocide

**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 (Minimum Degrees of Hazards) Notice 2017.

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  
8.2C – Skin corrosive  
8.3A – Eye corrosive  
9.1D – Slightly harmful in the aquatic environment or otherwise designed for biocidal action  
9.2A – Very ecotoxic in the soil environment  
9.3B – Ecotoxic to terrestrial vertebrates

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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  
 Specific target organ systemic toxicant (single exposure) – Category 2  
 Specific target organ systemic toxicant (repeated exposure) – Category 2  
 Skin corrosion/irritation – Category 1C  
 Serious eye damage/eye irritation – Category 1  
 Aquatic toxicity (acute) – Category 4

Note: There is no GHS equivalent classification for soil ecotoxicity or terrestrial vertebrate toxicity.

**Hazard Statements:**

- H227 Combustible liquid
- H330 Fatal if inhaled
- H311 Toxic in contact with skin
- H301 Toxic if swallowed
- H317 May cause an allergic skin reaction
- H341 Suspected of causing genetic defects
- H350 May cause cancer
- H371 May cause damage to organs via ingestion or inhalation
- H373 May cause damage to organs through prolonged or repeated exposure via ingestion or inhalation
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H401 Toxic to aquatic life
- H421 Very toxic to the soil environment
- H432 Toxic to terrestrial vertebrates

**GHS Pictograms:**



**DANGER**

**PREVENTION STATEMENTS:**

- P102 Keep out of reach of children.
- P103 Read label before use.
- 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves, protective clothing and eye/face protection.

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P281 Use personal protective equipment as required.  
 P284 Wear respiratory protection fitted with an organic vapour cartridge.

**RESPONSE STATEMENTS:**

P101 If medical advice is needed, have product label or container at hand.  
 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.  
 P310 Immediately call a POISON CENTRE or doctor.  
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P312 Call a POISON CENTRE or doctor if you feel unwell.  
 P363 Wash contaminated clothing before reuse.  
 P321 <No specific treatment available>  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
 P310 Immediately call a POISON CENTRE or doctor.  
 P308+P313 If exposed or concerned: Get medical advice/attention.  
 P391 Collect spillage.

**STORAGE**

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

**DISPOSAL**

In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.

**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Main Component	CAS Number	Concentration
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.

**In Contact with Eye:** Hold eyes open, flush with water for at least 15 minutes. Seek immediate medical attention.

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

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**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.

### 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.

**Suitable Extinguishing Media:** Use water fog or spray, 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.

### Section 6: ACCIDENTAL RELEASE MEASURES

**An emergency response plan is required under Part 5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 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 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. Alternatively, a Formalin specific spill kit may be used. 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:** Store in a closed container in a well-ventilated area. Keep away from heat and direct sunlight. Store locked up.

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

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Workplace Exposure Standards NZ:</b>	<p>No Workplace Exposure Standards have been established for this product. Workplace Exposure Standards have been established for the following ingredients:</p> <p>Formaldehyde: TWA 0.5 ppm (8-hour shift), 0.33 ppm (12-hour shift). Ceiling 1 ppm.</p> <p>Methanol: TWA 200 ppm, 262 mg/m<sup>3</sup>. STEL 250 ppm, 328 mg/m<sup>3</sup>.</p>
<b>Engineering Controls:</b>	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.
<b>Personal Protective Equipment:</b>	Observe good chemical hygiene practice.
<b>Hand protection:</b>	Wear protective gloves that are resistant to the product. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.
<b>Skin and body protection:</b>	Wear suitable protective clothing. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.
<b>Eye protection:</b>	Use safety glasses with side shields or chemical goggles to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.
<b>Respiratory protection:</b>	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.
<b>Other information:</b>	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

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### 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, alkalis, phenols and urea.

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

### Section 11: TOXICOLOGICAL INFORMATION

#### Acute Exposure

**Acute Toxicity:** LD50 oral > 50 - ≤ 300 mg/kg.  
 LD50 dermal > 200 - ≤ 1000 mg/kg  
 LC<sub>50</sub> inhalation (vapours) > 0.5 - ≤ 2.0 mg/L

**Inhalation:** Fatal if inhaled.

**Ingestion:** Toxic if swallowed.

**Skin Contact:** Toxic in contact with skin. Skin corrosive.

**Eye Contact:** Eye corrosive.

**Sensitiser:** Contact sensitiser. May cause an allergic skin reaction.

#### Chronic Exposure:

**Mutagen/Carcinogen/Reproductive Toxicant** Known carcinogen. Suspected mutagen.

**Specific Target Organ Systemic Toxicity:** Harmful to human target organs or systems on both single and prolonged or repeated exposures via ingestion and/or inhalation.

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

### Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Slightly harmful in the aquatic environment or otherwise designed for biocidal action. Very ecotoxic in the soil environment. Toxic to terrestrial vertebrates.

**Persistence/degradability:** Not persistent.

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**Bioaccumulation:** Not bioaccumulative.

**Mobility:** Product is soluble in water.

Ecotoxicity data is based on hazardous ingredient information.

**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 chemical or empty container.

**Section 14: TRANSPORT INFORMATION**

Classified as a Dangerous Good for transport in accordance with NZS5433:2012, IMDG or IATA.



NZS5433:2012

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: 2Z

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

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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

**HSNO Approval Code:** HSR001518

<b>HSNO Classifications:</b>	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
	8.2C	Skin corrosive
	8.3A	Eye corrosive
	9.1D	Slightly harmful in the aquatic environment or otherwise designed for biocidal action
	9.2A	Very ecotoxic in the soil environment
	9.3B	Toxic to terrestrial vertebrates

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. 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.



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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: 7/08/2019

Reason for Revision: Update to New Zealand regulatory requirements.

References:

EPA NZ Chemical Classification and Information Database  
EPA Guide: Assigning a Hazardous Substance to a Group Standard, 2014

**END OF SAFETY DATA SHEET**