

Date of issue: 1 September 2020

Revised by: Drew Chadwick

SDS No: 1

Safety Data Sheet

FIL QUANTUM ONE

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

Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: FIL Quantum One

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: Acid detergent, sanitiser

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: **HSR002526**

HSNO CLASSIFICATIONS: 6.1D – Acutely toxic, oral
6.1E – Acutely toxic, dermal
8.1A – Corrosive to metals
8.2C – Skin corrosive
8.3A – Eye corrosive
9.1D – Slightly harmful in the aquatic environment
9.3C – Harmful to terrestrial vertebrates

GHS Classification: Acute toxicity, oral – Category 4
Acute toxicity, dermal – Category 5
Corrosive to metals – Category 1
Skin corrosion/irritation – Category 1C
Serious eye damage/eye irritation – Category 1
Aquatic toxicity (chronic) – Category 4

Note: There is no GHS equivalent for terrestrial vertebrate toxicity.

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Hazard Statements:

- H302 Harmful if swallowed
- H313 May be harmful in contact with skin
- H290 May be corrosive to metals
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H413 May cause long lasting harmful effects to aquatic life
- H433 Harmful to terrestrial vertebrates

GHS Pictograms:



DANGER

PREVENTION STATEMENTS:

- P102 Keep out of reach of children
- P103 Read Label before use.
- P234 Keep only in original container.
- P260 Do not breathe mist/spray.
- P264 Wash hands, exposed skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment
- P280 Wear protective gloves, protective clothing, and eye/face protection.

RESPONSE STATEMENTS:

- P101 If medical advice is needed, have product container or label at hand.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Remove 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.
- P321 Specific treatment (see first aid instructions on this label).
- 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/physician.
- P390 Absorb spillage to prevent material damage.

STORAGE:

- P405 Store locked up.
- P406 Store in corrosive resistant container with a resistant inner liner.

DISPOSAL:

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

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Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	CAS Number	Concentration
Phosphoric acid	7664-38-2	< 40%
Citric acid, monohydrate	5949-29-1	< 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. Seek medical attention if symptoms persist.

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. Seek immediate medical attention.

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: Product is not flammable or combustible.

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

Precautions in Connection with Fire: May give off toxic and corrosive fumes in a fire. Electrical conductor – isolate power in case of spills

Advice for firefighters: Wear full firefighting gear and self-contained breathing apparatus. Prevent spills from entering drains and water courses.

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 1,000L.

Precautions: Clear area of all unprotected personnel. Keep unnecessary and unprotected

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personnel from entering area. Substance may conduct electricity, ensure power supply is isolated. Avoid generating mist/spray. Avoid release to the environment.

Suitable Protective Equipment: Emergency responders must use personal protective equipment, including gloves, protective overalls and footwear, safety goggles or face shield and respiratory protection if there is a risk of inhaling mist/spray.

Spill or Leak Procedures. Contain the spill. Small quantities may be neutralised with soda ash. Absorb with suitable inert material such as sand, earth. Collect spilled material and place in a suitable, clean, chemical waste container. Ensure waste container is properly labelled.

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. Avoid generating mists/spray. 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 locked up. Store in original container. Keep away from heat and direct sunlight. Store away from food and animal feed.

Site Storage Requirements: Site Signage will be required when quantities exceed 1,000L.

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 set for the following ingredient:

Phosphoric acid: TWA 1 mg/m³

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. Use in a well-ventilated area. If natural ventilation is insufficient consider engineering controls such as local exhaust ventilation to ensure workers are not exposed to levels exceeding the exposure standards.

Personal Protective Equipment: Observe good chemical hygiene practice.

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

Skin and body protection: Use protective overalls and PVC apron. Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.

Eye protection:

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Use chemical safety goggles to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.

Respiratory protection:

Where there is inadequate ventilation and use results in the formation of mists/spray, use a respirator. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection.

Other information:

PPE selected must be impervious to the substance. Handle in accordance with safe industrial hygiene practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Colour:	Yellow
Odour:	Odourless	Odour Threshold:	Not applicable
pH:	1.5	Solubility:	Fully miscible
Melting/Freezing Point:	Approx. -15°C (FP)	Boiling Point:	Approx. 105°C
Flash Point:	Not applicable	Flammability:	Not flammable
Lower/Upper Flammability Limits:	Not applicable	Vapour Pressure:	Not applicable
Vapour Density:	Not applicable	Relative Density:	1.29
Partition Coefficient:	Not available	Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not available	Kinematic Viscosity:	Not available

Section 10: STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions.
Reactivity:	Reacts exothermically with alkalis. Corrodes metal.
Conditions to Avoid:	Avoid generating mists/spray. Avoid excessive heat. Avoid electrical sources of ignition.
Incompatibility:	Incompatible with strong oxidisers, alkalis, powdered metals and iron containing compounds.
Hazardous Decomposition:	Decomposition may result in formation of toxic and corrosive fumes.

Section 11: TOXICOLOGICAL INFORMATION

Acute Exposure

Acute Toxicity:	LD50 oral > 300 - ≤ 2000 mg/kg. LD50 dermal > 2000 to ≤ 5000 mg/kg LC ₅₀ inhalation (mist) > 5.0 mg/L
Inhalation:	Inhalation of large volumes of mists/spray may cause irritation to mucous membranes.
Ingestion:	Ingestion may cause chemical burns to mouth and gastrointestinal tract and may

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cause nausea, diarrhoea and vomiting.

Skin Contact: Skin corrosive

Eye Contact: Eye corrosive. May cause corneal damage and permanent injury.

Sensitiser: Not expected to be a respiratory or contact sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive Toxicant No chronic toxicity effects expected.

Specific Target Organ Systemic Toxicity: No harmful effects known.

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, designed for biocidal action. Harmful to terrestrial vertebrates. Avoid accidental losses to the environment wherever possible.

Persistence/degradability: Not available.

Bioaccumulation: Not available

Mobility: Product is soluble in water.

Ecotoxicity data is based on hazardous ingredient information.

Section 13: DISPOSAL CONSIDERATIONS

Disposal: Do not allow product to enter drains or waterways. Recycle and reuse wherever possible. Waste product may be treated with soda ash prior to disposal so it is no longer hazardous. Dispose of waste product via an approved waste disposal contractor.

Disposal of Packaging: Dispose of packaging via an approved waste disposal contractor. Triple rinse containers when empty. Add rinse solution to use solutions.

Avoid contamination of natural water supplies with chemical or empty container. After cleaning, all existing labels should be removed

Section 14: TRANSPORT INFORMATION

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

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NZS5433:2012
 UN No: 1805
 Proper Shipping Name: Phosphoric acid solution
 Class: 8
 Packing Group: III
 Environmental hazard: No
 Limited Quantity: 5L
 Hazchem Code: 2R

IMDG:
 UN No: 1805
 Proper Shipping Name: Phosphoric acid solution
 Class: 8
 Packing Group: III
 Marine Pollutant: No
 EmS: F-A, S-B
 Limited Quantity: 5L

IATA:
 UN No: 1805
 Proper Shipping Name: Phosphoric acid solution
 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: Cleaning Product (Corrosive)

HSNO Approval Code: HSR002526

HSNO Classifications:

6.1D	Acutely toxic, oral
6.1E	Acutely toxic, dermal
8.1A	Corrosive to metals
8.2C	Skin corrosive
8.3A	Eye corrosive
9.1D	Slightly harmful in the aquatic environment
9.3C	Harmful to terrestrial vertebrates

This substance triggers:

Compliance Certificate	N/A
Certified Handler	N/A
Emergency Response Plan	1,000 L

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Secondary Containment 1,000 L
 Signage 1,000 L

This substance is not 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.

This substance is approved under HSNO for use as a cleaning product. 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: 1/9//2020

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