

Date of issue: 9 August 2019
 Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

Safety Data Sheet

DIOXISHIELD PART A (ACTIVATOR)

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

Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: Dioxishield Part A

Other Names: Dioxishield Activator, FIL Citric Acid Activator

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: Add to sodium chlorite teat spray base to create
 chlorine dioxide

In Case of Emergency Contact:

CHEMCALL: 0800 CHEMCALL (243 622)

Section 2: HAZARDS IDENTIFICATION

Not 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: **HSR006516**

HSNO CLASSIFICATIONS: 8.3A – Corrosive to eyes

GHS Classification: Serious eye damage/eye irritation – Category 1

Hazard Statements:

H318 Causes serious eye damage

Date of issue: 9 August 2019
 Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

GHS Pictograms:



DANGER

PREVENTION STATEMENTS:

- P102 Keep out of reach of children.
- P103 Read Label before use.
- P280 Wear protective gloves and eye/face protection.

RESPONSE STATEMENTS:

- P101 If medical advice is needed, have product container or label at hand.
- 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.

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
Citric acid	77-92-9	3-10%

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 medical attention if skin irritation develops and persists.
- 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 if symptoms develop and persist. If vomiting occurs, keep head below hips to prevent aspiration to

Date of issue: 9 August 2019
 Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

lungs.

Advice to Doctor: Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Product is not flammable or combustible.

Suitable Extinguishing Media: Use extinguisher suitable for surrounding environment and materials.

Precautions in Connection with Fire: Decomposes on heating to emit 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 10,000L.

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

Suitable Protective Equipment: Emergency responders should use personal protective equipment, including gloves and safety glasses. Respiratory protection is not normally required.

Spill or Leak Procedures. Small quantities may be neutralised with soda ash provided the area is well-ventilated. Absorb the spill with suitable absorbent material and collect into a properly labelled waste container for disposal. Residual quantities may be washed away with water.

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 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. Keep away from heat and direct sunlight.

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

Date of issue: 9 August 2019
 Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ:	No Workplace Exposure Standards have been established for this product.
Engineering Controls:	Eyewash facilities should be provided in the work area where there is a risk of exposure to eyes. Natural ventilation should be adequate under normal conditions of use.
Personal Protective Equipment:	Observe good chemical hygiene practice.
Hand protection:	Wear protective gloves to avoid product getting on hands and possible transfer to eyes. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.
Skin and body protection:	Protective clothing is recommended if handling large quantities. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.
Eye protection:	Use safety glasses with side shields to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.
Respiratory protection:	Not normally required under typical use conditions.
Other information:	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:	3.2	Solubility:	Completely miscible
Melting/Freezing Point:	Not available	Boiling Point:	Not available
Flash Point:	Not applicable	Flammability:	Not flammable
Lower/Upper Flammability Limits:	Not applicable	Vapour Pressure:	Not applicable
Vapour Density:	Not applicable	Relative Density:	1.08
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:	Will react exothermically with alkalis.
Conditions to Avoid:	High temperatures, incompatible materials. Avoid generating mists/sprays.

Date of issue: 9 August 2019
 Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

Incompatibility: Keep away from strong oxidisers, strong alkalis, powdered metals and iron-containing compounds.

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

Section 11: TOXICOLOGICAL INFORMATION

Acute Exposure

Acute Toxicity: LD50 oral > 5000 mg/kg.
 LD50 dermal > 5000 mg/kg
 LC₅₀ inhalation (mist/spray) > 5.0 mg/L

Inhalation: Not an expected route of exposure during normal conditions of use.

Ingestion: Not expected to be harmful if swallowed.

Skin Contact: Not expected to be a skin irritant.

Eye Contact: Eye corrosive.

Sensitiser: Not known to cause respiratory or contact sensitisation.

Chronic Exposure:

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

Specific Target Organ Systemic Toxicity: No known effects.

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

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not expected to be ecotoxic.

Persistence/degradability: Not available.

Bioaccumulation: Not available

Mobility: Product is soluble in water.

Ecotoxicity data is based on hazardous ingredient information.

Date of issue: 9 August 2019
 Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

Section 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. 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

Not classified as a Dangerous Good for transport in accordance with NZS5433:2012, IMDG or IATA.

Ensure transportation methods prevent leakage from packages and collapsing loads.

Section 15: REGULATORY INFORMATION

HSNO Allocation: Citric acid >3-10% in a non-hazardous diluent.

HSNO Approval Code: HSR006516

HSNO Classifications: 8.3A Eye corrosive

This substance triggers:	Compliance Certificate	N/A
	Certified Handler	N/A
	Emergency Response Plan	10,000L
	Secondary Containment	10,000L
	Signage	1,000L

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 an animal treatment. 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.

Date of issue: 9 August 2019
Revised by: Drew Chadwick, FIL Technical Manager SDS No: 1

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: 9/08/2019

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