



## SAFETY DATA SHEET

According to  
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

### Section 1. Identification of the material and the supplier

Product: **Fludio**  
Product Use: Seed Treatment  
Restriction of Use: Refer to Section 15

New Zealand Supplier: **Adria Crop Protection Solutions**  
Address: 407 State Highway 16  
Kumeu 0841,  
Auckland

Telephone: +64 9 412 9817  
Fax: +64 9 412 9807  
Website: www.adria.nz

**Emergency No: 0800 734 607 (24hr)**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 29 October 2018

### Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

**EPA Approval No: HSR100622**

#### Pictograms



Chronic



Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.9B	H373	May cause damage to organs through single, prolonged or repeated exposure.	STOT RE 2
9.1B	H411	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 2

Prevention Code	Prevention Statement
P103	Read label before use.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.

Response code	Response Statement
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Refer to Section 13.

### Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content (%w/v)	CAS NUMBER.
Fludioxonil	10.00	131341-86-1
Other ingredients determined not to be hazardous	To bal	

### Section 4. First Aid Measures

Routes of Exposure:

**If in Eyes** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**If on Skin** After contact with skin, wash immediately with soap and water. If skin irritation occurs: get medical advice/attention.

**If Swallowed** Do NOT induce vomiting if swallowed. Administer medicinal charcoal in a large quantity of water. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766) or seek medical attention immediately.

**If Inhaled** Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Call a POISON CENTRE or a doctor immediately.

#### Most important symptoms and effects, both acute and delayed

Symptoms:

**Ingestion:** Not applicable.

**Inhalation:** Not applicable.

**Skin:** Not applicable.

**Eye:** Not applicable.

**Chronic:** May cause damage to organs through single, repeated or prolonged exposure.

**Treatment:** No known specific antidote. Treat symptomatically.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	This product is non-flammable.
<b>Hazards from products</b>	Combustion products are toxic and/or irritants. Measures must be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.
<b>Suitable Extinguishing media</b>	Wear Self-contained breathing apparatus and appropriate chemical-protective clothing.

<b>Recommended protective clothing &amp; Precautions for firefighters</b>	Wear Self-contained breathing apparatus and appropriate chemical-protective clothing.
<b>HAZCHEM CODE</b>	<b>3Z</b>

## Section 6. Accidental Release Measures

### Personal precautions:

Use protective clothing as detailed in Section 8. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately. Rewash contaminated clothing before reuse.

### Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Notify authorities if product enters sewers or public waters.

### Spill and Disposal procedures:

Absorb spills with inert material and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely, according to local Council regulations.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Ventilation required.

### Precautions for Storage:

- Store in original container tightly closed and in a locked, cool, dry, ventilated area away from foodstuffs, fertilisers and seeds and sources of ignition.
- Protect from extreme temperatures.
- Protect from temperatures above: 40 °C.
- Store away from incompatible materials listed in Section 10.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

### Engineering Controls / Industrial Hygiene

Ensure adequate ventilation.

## Personal Protection Equipment



<b>Eyes</b>	Wear safety goggles with side-shields.
<b>Hands</b>	Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)).
<b>Skin</b>	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.
<b>Respiratory</b>	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles.
<b>General</b>	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use and wash hands and face before breaks and after work. Clean protective gear and contaminated equipment with soap or soda solution.

### Section 9 Physical and Chemical Properties

<b>Appearance</b>	Liquid (suspension concentrate)
<b>Colour</b>	Red
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	Not available
<b>pH</b>	7.9
<b>Melting Point/Boiling Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	>100°C
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Density</b>	1.044g/l
<b>Water Solubility</b>	Not available
<b>Partition Coefficient:</b>	Not available
<b>Ignition Temperature</b>	460°C(auto-ignition)
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available

### Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under normal storage and handling conditions.
<b>Possibility of hazardous reactions</b>	None under normal storage and use conditions.
<b>Conditions to Avoid</b>	Avoid intense heat. Keep away from foodstuffs, acids and alkalis.
<b>Incompatible Materials</b>	None under normal conditions. Poisonous fumes may be released during fire.
<b>Hazardous Decomposition Products</b>	None known at time of publishing.

**Section 11 Toxicological Information****Acute Effects:**

<b>Swallowed</b>	Not applicable. LD50: > 2000 mg/kg, rat.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable. LC50 (4 hr) (Rat) >4.37 mg/l
<b>Eye</b>	Not applicable.
<b>Skin</b>	Not applicable.

**Chronic Effects:**

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	May cause damage to organs through single exposure.
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

**Section 12. Ecotoxicological Information**

<b>Ecological effects information</b>	9.1B = Toxic to aquatic life with long lasting effects.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available
<b>Acute fish toxicity:</b>	LD50 = > 2,000 mg/kg (mallard ducks and bobwhite quail)
<b>Toxicity for daphnia:</b>	LC50 (48 h) = 10 mg/L (Daphnia magna straus)
<b>Toxicity to algae:</b>	EbC50 (72 h) = 3.0 mg/L (Pseudokirchneriella subcapitata [green algae]) ErC50 (72 h) = 11 mg/L (Pseudokirchneriella subcapitata [green algae])
<b>Toxicity to bees:</b>	LD50 (48 hours, oral) = > 329 µg/bee; LD50 (48 hours, contact) = > 101 µg/bee
<b>Precautions:</b>	Do not allow to enter waterways.

**Section 13. Disposal Considerations****Disposal Method:**

Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal.

**Empty container precautions:**

Avoid contamination of any water supply with chemical or empty container.

**Precautions or methods to avoid:** Avoid release to the environment.

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



### Road, Rail, Sea and Air Transport

<b>UN No</b>	3082
<b>Class - Primary</b>	9
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	<b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, (FLUDIOXONIL) LIQUID, N.O.S.</b>
<b>Marine Pollutant</b>	Yes
<b>Special Provisions- Limited Quantities</b>	If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

### Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR100622

HSNO Classification: 6.9B, 9.1B

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	1000L(9.1B)
Emergency Response Plan (Schedule 5)	1000L(9.1B)
Secondary Containment (Schedule 5)	1000L(9.1B)
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls document - HSR100622
<b>HSNO Additional Controls (Restrictions of use)</b>	
77A	The substance must not be applied onto or into water.
<b>Hazardous Property Controls Notice 2017</b>	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
Hoc Notice Part 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances.
<b>ACVM Act and Regulations</b>	
ACVM Approval No See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration controls	P8411

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

### Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

### Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have 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, TCC (NZ) Ltd accept 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

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Please contact Adria, if further information is required.

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