



Preparation Date 11-Aug-2017

Revision date 02-Jan-2019

Revision Number: 3

Safety Data Sheet

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Description: StartUP FLUDI Seed Treatment

Other means of identification

Product code 12U-GGU

Registration number(s) 70506-334

Recommended use of the chemical and restrictions on use

Recommended use Solution for seed treatment.

Uses advised against
Non labeled activities

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number 1-800-438-6071
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

Harmful in contact with skin
HARMFUL IF INHALED



Appearance Viscous

Physical state Liquid

Odor No characterisitc odor

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection
Do not get in eyes, on skin, or on clothing
Use only outdoors or in a well-ventilated area

IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor if you feel unwell
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION****3. Composition/information on Ingredients**

Chemical name	CAS No	Weight-%
Fludioxonil	131341-86-1	40

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures**FIRST AID MEASURES**

Eye contact	If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

No information available.

Explosion data**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with skin and eyes. Use personal protective equipment. Wash thoroughly after handling.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep out of reach of children. Provide adequate ventilation. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

incompatible materials Do not mix or allow contact with oxidizing agents as a hazardous chemical reaction may occur.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment**Eye/Face Protection****Skin protection****Respiratory protection**

Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact. If splashes are likely to occur, wear: Goggles. Chemical resistant gloves. Chemical resistant footwear plus socks. Coveralls. Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid	Odor	No characterisitic odor
Appearance	Viscous		
color	Off-white		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	7.3	Approximately
Melting point/freezing point	no data available	
Boiling Point/Range	No information available	
Flash Point	> 102 °C / > 215.6 °F	Pensky Martin Closed Cup
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	1.19 g/ml @ 20 C	
Water solubility	Miscible with water	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	no data available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	230.9 cP @ 20 C	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
Liquid Density	10 lb/gal

10. Stability and Reactivity

Reactivity

None known

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

incompatible materials

Do not mix or allow contact with oxidizing agents as a hazardous chemical reaction may occur.

Hazardous decomposition products

Hydrogen chloride. Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

StartUP FLUDI
Acute Oral LD50 = >5,000 mg/kg
Acute dermal LD50 = >2,000 mg/kg
Acute inhalation LC50 (4hr) = > 5.636 mg/L

Inhalation	May cause irritation of respiratory tract. Harmful by inhalation.
Eye contact	Contact with eyes may cause irritation.
Skin contact	Substance may cause slight skin irritation.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	Did not cause sensitization.
Mutagenic effects	no data available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	Not Available.
STOT - Single Exposure	no data available.
STOT - Repeated Exposure	no data available.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral	> 5000 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rat)
LC50 Inhalation	> 22 mg/l (rat) (1 hr)

12. Ecological Information

ecotoxicity

Fludioxonil
Fish - Rainbow trout 96 hr LC50 = 0.47 ppm
Green Algae 5 day EC50 = 0.087 ppm
Invertebrate Daphnia magna 48 hr EC50 = 0.9 ppm
Bird Bobwhite quail 14 day LD50 = >2000 mg/kg

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

Does not bioaccumulate.

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
Contaminated packaging	Refer to product label.

14. Transport Information

<u>DOT</u>	When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated. When shipped in bulk, by vessel, or internationally use the IMDG shipping description:
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<u>TDG</u>	When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1
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IATA

UN/ID no.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (fludioxonil)
Hazard class	9
Packing group	PG III
Description	IMDG - Marine Pollutant

IMDG

UN/ID no.	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (fludioxonil)
Hazard class	9
Packing group	PG III
Environmental hazards	IMDG - Marine Pollutant

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word CAUTION

Keep out of Reach of Children. Harmful if absorbed through the skin. Causes moderate eye irritation. Toxic to fish and aquatic invertebrates.

International Inventories

USINV	Not present
DSL/NDSL	Not present
EINECS/	Not Present
ELINCS	
ENCS	Not Present
China	Not Present
KECL	Not Present

PICCS	Not Present
AICS	Not Present
TSCA	Not Present

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CERCLA

Not applicable

CERCLA

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Fludioxonil 131341-86-1 (40)			X	

State Regulations

State Right-to-Know

Not applicable

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-334

16. Other Information

NFPA HEALTH 1 flammability 1 Instability 0 Physical hazard -

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Revision Summary

Update logo Update section 1 Update Section 16***

Disclaimer

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