

# Safety Data Sheet

Preparation Date 11-Aug-2017

Revision date 14-Mar-2024

Revision Number: 3

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

### Product identifier

Product Description: RACEREADY F 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

Meristem Crop Performance  
489 Village Park Dr.,  
Powell, OH 43065  
833-637-4783

### 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

<b>Eye contact</b>	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.
<b>Skin contact</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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**

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.

**Skin protection**

Chemical resistant gloves. Chemical resistant footwear plus socks. Coveralls.

**Respiratory protection**

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**

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

**OTHER INFORMATION**

<b>Softening point</b>	No information available
<b>molecular weight</b>	No information available
<b>VOC Content</b>	No information available
<b>Liquid Density</b>	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

Fludioxonil  
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**

<b>Waste Disposal Method</b>	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.
<b>Contaminated packaging</b>	Refer to product label.

**14. Transport Information**

<b><u>DOT</u></b>	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:
-------------------	---

<b><u>TDG</u></b>	When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1
-------------------	---

**IATA**

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

**IMDG**

<b>UN/ID no.</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (fludioxonil)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Environmental hazards</b>	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**

<b>USINV</b>	Not present
<b>DSL/NDL</b>	Not present
<b>EINECS/</b>	Not Present
<b>ELINCS</b>	
<b>ENCS</b>	Not Present
<b>China</b>	Not Present
<b>KECL</b>	Not Present

PICCS	Not Present
AICS	Not Present
TSCA	Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - 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  
 IECS - 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** -

**Preparation Date**                      11-Aug-2017  
**Revision date**                      02-Jan-2019  
**Revision Summary**

# Safety Data Sheet

Preparation Date 11-Apr-2016

Revision date 14-Mar-2024

Revision Number: 5

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

### Product identifier

**Product Description:** RACEREADY F SEED TREATMENT-

### Other means of identification

**Product code** ST-001

**Registration number(s)** 70506-325

### Recommended use of the chemical and restrictions on use

**Recommended use** Fungicides.

**Uses advised against** Activities contrary to label recommendation

### 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** light brown

**Physical state** Liquid

**Odor** faint

#### 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**

- May be harmful in contact with skin

**3. Composition/information on Ingredients**

Chemical name	CAS No	Weight-%
Metalaxyl	57837-19-1	28.98
Kaolinite, Hydrous Aluminum Silicate	1332-58-7	2.84

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**

<b>Eye contact</b>	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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** Provide adequate ventilation. Avoid contact with skin and eyes. Remove all sources of ignition.

### 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** Wear personal protective equipment. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep out of reach of children.

### Conditions for safe storage, including any incompatibilities

**Storage** Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Keep in a dry, cool and well-ventilated place.

**incompatible materials** Incompatible with oxidizing agents. Strong acids, Strong bases,

## 8. Exposure Controls/Personal Protection

### Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Kaolinite, Hydrous Aluminum Silicate	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction

**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**

Avoid contact with eyes. Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.

#### **Skin protection**

Wear protective gloves/clothing. Chemical resistant gloves. Chemical resistant footwear plus socks.

#### **Respiratory protection**

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		
Appearance	light brown	Odor	faint
color	Tan		

Property	VALUES	Remarks/ • Method
pH	7.7	(1% aq)
Melting point/freezing point	no data available	
Boiling Point/Range	No information available	
Flash Point	>100 C/ >212 F	
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	1.094 g/cm3	
Water solubility	No information available	
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	No information available	
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	9.13 lb/gal

## 10. Stability and Reactivity

### Reactivity

no data available

### 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**

Incompatible with oxidizing agents. Strong acids, Strong bases,

**Hazardous decomposition products**

Carbon oxides. Nitrogen oxides (NOx).

**11. Toxicological Information****Information on Likely Routes of Exposure**

<b>Product information</b>	Metalaxyl 317 FS : Oral LD50 (rat) >2,300 mg/kg Dermal LD50 (rabbit) >2,000 mg/kg Inhalation LC50 (rat) > 5.164 (4hr) mg/L Moderate eye and skin irritation
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	May cause slight irritation.
<b>Skin contact</b>	May cause irritation.
<b>Ingestion</b>	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**

<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	no data available.
<b>Carcinogenicity</b>	The information below indicates whether any agency has listed any ingredient as a carcinogen.
<b>Reproductive effects</b>	Not Available.
<b>STOT - Single Exposure</b>	no data available.
<b>STOT - Repeated Exposure</b>	no data available.
<b>Aspiration hazard</b>	No information available.

**Numerical Measures of Toxicity - Product information**

<b>LD50 Oral</b>	> 2300 mg/kg
<b>LD50 Dermal</b>	> 2000 mg/kg
<b>LC50 Inhalation</b>	> 20 mg/l

**12. Ecological Information****ecotoxicity**

Metalaxyl  
FISH  
Rainbow trout = 96 hr LC50 130-132 mg/L  
AQUATIC INVERTEBRATES  
Daphnia magna = LC50 28-121 mg/L

**Persistence/Degradability**

no data available.

**Bioaccumulation/ Accumulation**

Bioaccumulative potential.

Chemical name	Log Pow
Metalaxyl 57837-19-1	log Pow <3

**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****DOT**

NOT REGULATED

**IATA**

NOT REGULATED

**IMDG**

NOT REGULATED

**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 swallowed or absorbed through the skin.****International Inventories**

USINV	Not present
DSL/NDL	Not present
EINECS/ ELINCS	Not Present
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/NDL - 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

### State Regulations

### State Right-to-Know

Not applicable

### International regulations

### U.S. EPA Label information

EPA Pesticide registration number 70506-325

## 16. Other Information

<b>NFPA</b>	<b>HEALTH</b> 2	<b>flammability</b> 1	<b>Instability</b> 0	<b>Physical hazard</b> -
<b>Preparation Date</b>	11-Apr-2016			
<b>Revision date</b>	02-Jan-2019			
<b>Revision Summary</b>				

Preparation Date 12-Jun-2017

Revision date 14-Mar-2024

Revision Number: 3

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

### Product identifier

**Product Description:** RACEREADY F SEED TREATMENT

### Other means of identification

**Product code** RD-20170612C

**UN/ID no.** UN3082

**Registration number(s)** 70506-341

### Recommended use of the chemical and restrictions on use

**Recommended use** Solution for seed treatment.

**Uses advised against** Activities contrary to label recommendation

### 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 (Gases)	Category 2
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2

### Label elements

#### **EMERGENCY OVERVIEW**

#### **DANGER**

#### **Hazard Statements**

Harmful in contact with skin  
Fatal if inhaled  
May cause an allergic skin reaction  
Suspected of causing genetic defects

**Appearance** liquid**Physical state** Liquid suspension**Odor** no data available**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood

Wear cold insulating gloves/face shield/eye protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

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 skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)****OTHER INFORMATION**

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

### 3. Composition/Information on Ingredients

Chemical name	CAS No	Weight-%
Thiophanate-methyl	23564-05-8	46.2
1,2-Benzisothiazolin-3-one (Proxel GXL)	2634-33-5	0.024

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**

Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin contact**

Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.



Inhalation	Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician. Immediate medical attention is required. Call a physician or poison control center immediately. Toxic by inhalation.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician. Clean mouth with water and drink afterwards plenty of water afterwards.

**Most Important Symptoms and Effects, Both Acute and Delayed**

<b>Most Important Symptoms and Effects</b>	no data available.
--	--------------------

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

<b>Notes to physician</b>	Treat symptomatically.
---------------------------	------------------------

**5. Fire-fighting measures**

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>).  
Use: Dry chemical. Water spray. alcohol-resistant foam.

**Unsuitable extinguishing media** no data available.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapours.

**Hazardous combustion products** No information available.

**Explosion data**

**Protective equipment and precautions for firefighters**

Use personal protective equipment. 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**

<b>Personal Precautions</b>	Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.
-----------------------------	---

**Environmental Precautions**

<b>Environmental precautions</b>	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**

<b>Methods for Clean-Up</b>	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**

<b>Handling</b>	Wear personal protective equipment. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep out of reach of children. Wash thoroughly after handling.
-----------------	--

### Conditions for safe storage, including any incompatibilities

<b>Storage</b>	Keep out of the reach of children. Keep in a dry, cool and well-ventilated place.
<b>incompatible materials</b>	Strong oxidizing agents.

## 8. Exposure Controls/Personal Protection

<b>Exposure guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering controls</b>	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

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

#### Skin protection

Wear protective gloves/clothing. Socks and footwear.

#### Respiratory protection

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. 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

<b>Physical state</b>	Liquid suspension		
<b>Appearance</b>	liquid	<b>Odor</b>	no data available
<b>color</b>	Off-white to Tan		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
<b>pH</b>	6	Approximately
<b>Melting point/freezing point</b>	no data available	
<b>Boiling Point/Range</b>	No information available	
<b>Flash Point</b>	No information available	
<b>Evaporation Rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability limit in air</b>		
<b>Upper Flammability Limit</b>	No information available	
<b>Lower Flammability Limit</b>	No information available	
<b>vapor pressure</b>	No information available	
<b>Vapor Density</b>	No information available	
<b>Specific gravity</b>	1.220	
<b>Water solubility</b>	No information available	
<b>Solubility in Other Solvents</b>	No information available	
<b>Partition coefficient: n-octanol/water</b>	No information available	
<b>Autoignition temperature</b>	no data available	
<b>Decomposition temperature</b>	No information available	
<b>Viscosity, kinematic</b>	No information available	
<b>Dynamic viscosity</b>	350-500 cps	
<b>Explosive properties</b>	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 No information available

**10. Stability and Reactivity****Reactivity**

no data available

**Chemical stability**

Stable under normal conditions. Hazardous polymerisation does not occur.

**Possibility of hazardous reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerisation does not occur.

**Conditions to avoid**

No information available.

**incompatible materials**

Strong oxidizing agents.

**Hazardous decomposition products**

Carbon oxides.

**11. Toxicological Information****Information on Likely Routes of Exposure****Product information**

The toxicological data presented is for a formulated product with similar composition Single exposure studies indicate:

Oral: Practically non-toxic to rats (LD50 >5,000 mg/kg)

Dermal: No more than slightly toxic to rabbits (LD50 >2,000 mg/kg)

Inhalation: Slightly toxic to rats (4 hr LC50 1.8 mg/l)

Skin Irritation: Non-irritating to rabbits

Eye Irritation: Non-irritating to rabbits

Skin allergy was observed in guinea pigs following repeated exposure. Repeated or long-term oral administration produced effects on the thyroid, liver or kidneys in rats, mice and dogs. An increased incidence of liver tumors was observed in mice and thyroid tumors were observed in male rats following long-term oral exposure.

No effects were seen on the ability of male or female rats to reproduce when exposed orally for 2 successive generations. No birth defects were observed in the offspring of rats exposed orally during pregnancy. In rabbits, developmental effects were noted only at maternally toxic doses. No genetic changes were observed in tests using animal cells.

Polyglycol

Repeated exposure of rats to aerosol of some block polymers produced an inflammatory response and slight fibrosis in the lung. Long-term dietary administration of a block polymer to dogs produced no adverse effects. Some block polymers have produced genetic changes in tests using bacteria or animal cells.

Single exposure studies indicate that this material is practically non-toxic if swallowed (mouse LD50 >15,000 mg/kg) or absorbed through skin (rabbit LD50 2,000 mg/kg) moderately toxic if inhaled (rat 4 hr LC50 0.1-0.34 mg/l) and practically non irritating to rabbit eyes (10% aqueous solution).

**Inhalation**

HARMFUL IF INHALED.

Eye contact	May cause irritation.
Skin contact	May be harmful if absorbed through the skin.
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	No information available.
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.
Chronic toxicity	Avoid repeated exposure.
Aspiration hazard	No information available.

#### Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document .

LD50 Oral	5000 mg/kg (rat)
LD50 Dermal	> 2000 mg/kg (rat)
LC50 Inhalation	Inhalation LC50 7.2 mg/l

## 12. Ecological Information

#### ecotoxicity

Thiophanate methyl  
Carp 96 hr LC50 = >100 mg/L  
Fiddler crab 96 hr LC50 = >560 mg/L  
Bluegill 96 hr LC50 = 15.8 mg/L  
Daphnid 48 hr EC50 = 15.6 mg/L  
Shrimp 96 hr LC50 = 25.1 mg/L  
Trout 96 hr LC50 = 2.2 mg/L  
Oyster 96 hr LC50 = 4.6 ppm  
Highly toxic to catfish

16.64% of the mixture consists of components(s) of unknown hazards to the aquatic environment

#### Persistence/Degradability

no data available.

#### Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
1,2-Benzisothiazolin-3-one (Proxel GXL) 2634-33-5	1.3

#### Other Adverse Effects

no data available

## 13. Disposal Considerations

**Waste Treatment Methods**

<b>Waste Disposal Method</b>	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.
<b>Contaminated packaging</b>	Refer to product label.

**14. Transport Information**

<b>DOT</b>	Packages which contain an amount equal to or exceeding the RQ value of the technical ingredient must be labeled with the following shipping description:
<b>UN/ID no.</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s (Thiophanate methyl)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Reportable Quantity (RQ):</b>	10 lbs (Thiophanate methyl)

<b>IATA</b>	
<b>UN/ID no.</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Thiophanate methyl)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III

<b>IMDG</b>	
<b>UN/ID no.</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Thiophanate-methyl)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Environmental hazards</b>	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

**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:

<b>signal word</b>	CAUTION
<b>Ventilation Control</b>	PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.
<b>Keep out of Reach of Children. Harmful if swallowed. Harmful if inhaled or absorbed through skin.</b>	

**International Inventories**

<b>USINV</b>	Not present
<b>DSL/NDL</b>	Not present
<b>EINECS/</b>	Not Present
<b>ELINCS</b>	
<b>ENCS</b>	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/NDL** - 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 contains a chemical or 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

Chemical name	RQ	CERCLA EHS RQs	RQ
Thiophanate-methyl 23564-05-8	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ

#### CERCLA

Component	RQ
Thiophanate-methyl 23564-05-8 ( 46.2 )	10 lb

**SARA Product RQ** 0

#### RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Thiophanate-methyl 23564-05-8 ( 46.2 )			U409

### Pesticide Information

#### State Regulations

Component	California Prop. 65	Non-additive, corrosive chemical type
Thiophanate-methyl 23564-05-8 ( 46.2 )	Female Reproductive Male Reproductive	Female Reproductive Male Reproductive

#### State Right-to-Know

Not applicable

#### International regulations

##### U.S. EPA Label information

EPA Pesticide registration number 70506-341

### 16. Other Information

**NFPA** HEALTH 3 flammability 0 Instability 0 Physical hazard -

Preparation Date 12-Jun-2017

Revision date 02-Jan-2019

#### Revision Summary

Update logo Update section 1 Update Section 16\*\*\*

**Disclaimer**

UPL NA Inc. believes that the information and recommendations container herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of UPL NA Inc. and UPL NA Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

**End of SDS**

Page 23 / 23