

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 & I 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**

| | |
|---------------------|---|
| 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 characterisitc odor |
| Appearance | Viscous | | |
| color | Off-white | | |
| Property | VALUES | Remarks/ • Method | |
| 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

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**

| | |
|-------------------------------|---|
| 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: |
|-------------------|---|

| | |
|-------------------|---|
| <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 |
|-------------------|---|

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/NDL | 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/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

| 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 & I 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

| | |
|---------------------|---|
| 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 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. |
| 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 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 ³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ 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**

| | |
|----------------------------|---|
| Product information | 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 |
| Inhalation | May cause irritation of respiratory tract. |
| Eye contact | May cause slight irritation. |
| Skin contact | May cause 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 | No information available. |
| Mutagenic effects | no data available. |
| Carcinogenicity | The information below indicates whether any agency has listed any ingredient as a carcinogen. |
| 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 | > 2300 mg/kg |
| LD50 Dermal | > 2000 mg/kg |
| LC50 Inhalation | > 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

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

Safety Data Sheet

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&I 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

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**

Carbon dioxide (CO₂).

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**

Personal Precautions Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. 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 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

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

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

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

| | | | |
|-----------------------|-------------------|-------------|-------------------|
| Physical state | Liquid suspension | | |
| Appearance | liquid | Odor | no data available |
| color | Off-white to Tan | | |

| <u>Property</u> | <u>VALUES</u> | <u>Remarks/ • Method</u> |
|---|--------------------------|--------------------------|
| pH | 6 | Approximately |
| Melting point/freezing point | no data available | |
| Boiling Point/Range | No information available | |
| Flash Point | No information available | |
| 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 | 1.220 | |
| 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 | 350-500 cps | |
| 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 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

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

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

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

| | |
|--|--|
| signal word | CAUTION |
| Ventilation Control | 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. |
| Keep out of Reach of Children. Harmful if swallowed. Harmful if inhaled or absorbed through skin. | |

International Inventories

| | |
|----------------|-------------|
| USINV | Not present |
| DSL/NDL | 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/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

Safety Data Sheet

Preparation Date 17-Aug-2016

Revision date 14-Mar-2024

Revision Number: 4

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

Product identifier

Product Description: RACEREADY F&I SEED TREATMENT

Other means of identification

Product code 12U-327
Registration number(s) 70506-327

Recommended use of the chemical and restrictions on use

Recommended use Insecticide.

Uses advised against Non labeled activities 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 215-715-2174
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)

| | |
|--------------------|------------|
| Skin sensitization | Category 1 |
|--------------------|------------|

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

May cause an allergic skin reaction



Appearance no data available

Physical state Liquid

Odor sweet

Precautionary Statements - Prevention

Do not get in eyes, on skin, or on clothing
 Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

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-% |
|---|-------------|----------|
| Imidacloprid | 138261-41-3 | 48.7 |
| 1,2-Benzisothiazolin-3-one (Proxel GXL) | 2634-33-5 | 0.1 |
| Glycerine | 56-81-5 | 10 |

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 | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. 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 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. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. |
| Protection of First-aiders | Use personal protective equipment. |

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

Carbon dioxide (CO2).

Use: Dry chemical. Water spray. alcohol-resistant foam.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Hazardous combustion products Hydrogen chloride. Nitrous oxides.

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

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

7. Handling and Storage

Precautions for safe handling

Handling Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. Provide adequate ventilation. 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

Storage Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from light. Keep in properly labelled containers.

incompatible materials Potassium permanganate.

8. Exposure Controls/Personal Protection

Exposure guidelines

| Chemical name | ACGIH TLV | OSHA PEL |
|---------------|-----------|--|
| Glycerine | | TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction |

Engineering controls Ensure adequate ventilation, especially in confined areas.

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. Safety glasses with side-shields.

Skin protection

Long sleeved clothing. Chemical resistant apron. Protective gloves. Chemical resistant footwear plus socks.

Respiratory protection

Use only with adequate ventilation. 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 and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| | | | |
|---|--------------------------|--------------------------|-------|
| Physical state | Liquid | | |
| Appearance | no data available | Odor | sweet |
| color | white | | |
| Property | VALUES | Remarks/ • Method | |
| pH | 5.71 | (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 | 1.250 g/ml | | |
| 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 | 255.3 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 | 10.43 lb/gal |

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

Heating in air.

incompatible materials

Potassium permanganate.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Imidacloprid formulation 48.7% =
Acute oral LD50 = 990 mg/kg
Acute dermal LD50 = >2000 mg/kg
Acute inhalation LC50 (4hr) = >5.971 mg/L

Inhalation

May cause irritation of respiratory tract.

Eye contact

Moderately irritating to the eyes.

Skin contact

May be harmful if absorbed through the skin.

Ingestion

HARMFUL IF SWALLOWED.

Component Information

for Imidacloprid:
Acute oral LD50 - 380 mg/kg
Acute dermal LD50 - >5000 mg/kg

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

Imidacloprid (A.I.) was not considered carcinogenic in rats or mice in oncogenicity studies. Reproduction studies indicated that Imidacloprid is not a reproductive toxicant. Mutagenicity studies noted no mutagenic or genotoxic effects in in vitro and in vivo tests.

Developmental effects were observed at doses that caused material toxicity in rats and rabbits. It is not considered a primary developmental toxicant.

Reproductive effects

Imidacloprid neurotoxicity tests showed slight behavioral and activity changes only at the highest dose in rats. Neural tissues showed no correlating morphological changes.

STOT - Single Exposure

Not Available.

STOT - Repeated Exposure

no data available.

Chronic toxicity

no data available.

Aspiration hazard

Avoid repeated exposure.

No information available.

Numerical Measures of Toxicity - No information available

LD50 Oral

990 mg/kg

LD50 Dermal

> 2000 mg/kg

LC50 Inhalation

> 23.88 mg/l

12. Ecological Information

ecotoxicity

No information available

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 |
| Glycerine 56-81-5 | -1.76 |

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

TDG

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. Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. This pesticide is highly toxic to bees, birds, and aquatic invertebrates.

International Inventories

| | |
|---------|-------------|
| USINV | Not present |
| DSL/NDL | 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/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 70506-327

16. Other Information

NFPA

HEALTH 3

flammability 2

Instability 0

Physical hazard -

Preparation Date 17-Aug-2016

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 30 / 30