



Safety Data Sheet

Preparation Date 11-Oct-2023

Revision date 27-Jun-2024

Revision Number: 3

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

Identification of the product

Product Description IronGate Herbicide

Other means of identification

Internal SDS code 12-00IG

Registration number(s) 70506-629

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.

Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.

PO Box 12219

Research Triangle Park, NC 27709-12219

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 and Drug Safety (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 Corrosion/Irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Skin sensitization	Category 1B

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

May cause an allergic skin reaction

CAUSES SKIN IRRITATION

CAUSES EYE IRRITATION



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

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear cold insulating gloves/face shield/eye protection
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not get in eyes, on skin, or on clothing
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not spray on an open flame or other ignition source

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
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
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

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

- Harmful to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Flucarbazon sodium	181274-17-9	19.47
Cloquintocet mexyl	99607-70-2	4.87
Pyroxulam	422556-08-9	5.85
Ethoxylated fatty alcohol	78330-21-9	3.5

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. 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 MAY CAUSE ALLERGIC SKIN REACTION.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

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

Foam. Dry chemical. Carbon dioxide (CO₂). Water spray. Dry sand.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

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

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 Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Use personal protective equipment. Provide adequate ventilation. 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. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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 Avoid contact with skin and eyes. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Do not breathe vapours or spray mist. 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 container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

incompatible materials OXIDIZERS.

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. Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles. Face-shield.
Skin protection	Chemical resistant footwear plus socks. Long sleeved clothing.
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. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	No information available	
Physical state	Liquid	
Odor	characteristic	
color	brown	
<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	3.93	Approximately
Melting point/freezing point		None known
Boiling Point/Range		None known
Flash Point	> 100 C / 212 F	None known
Evaporation Rate		None known
Flammability (solid, gas)		None known
		Relative Density
		1.132 g/ml
Specific gravity		
Bulk density		None known
Water solubility		None known
Solubility in Other Solvents	No information available	None known
Partition coefficient: n-octanol/water		None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity	148.43 cps	None known

9.2 OTHER INFORMATION- NONE

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

No information available.

Incompatible materials

OXIDIZERS.

Hazardous decomposition products

None under normal use conditions.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information	IronGate Acute oral LD50 5,000 mg/kg Acute dermal LD50 >5,000 mg/kg Acute inhalation LC50 >5.01 mg/kg
Inhalation	Based on available data, the classification criteria are not met.
Eye contact	Severely irritating to eyes.
Skin contact	Based on available data, the classification criteria are not met. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	Based on available data, the classification criteria are not met.

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	5000 mg/kg
LD50 Dermal	> 5000 mg/kg
LC50 Inhalation	> 20 mg/l (1 hr)

12. Ecological Information

ecotoxicity

Flucarbazone sodium

LC50 FISH (oncorhynchus mykiss) 96 hr = >96.7 mg/L
LC50 GREEN ALGAE 96 hr = 6.4 mg/L
EC50 Daphnia 48 hr = 38.8 mg/L
Cloquintocet mexyl
FISH
Rainbow trout 96 hr LC50 = >0.97 ppm
INVERTBRATE
Daphnia magna 48 hr EC50 = >0.82 ppm
BIRD
Bobwhitie quail 14 day LD50 = >2000 mg/kg

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods**Waste Disposal Method**

Pesticide wastes can be 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

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 refer to the IMDG shipping description:

TDG

When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1

In bulk, by vessel or internationally - use IMDG description

IATA**UN/ID no****Proper shipping name****Hazard class****Packing group****Description**

Single or inner packagings less than 5L (liquid) or 5kg net (solids) are excepted from the Dangerous Goods regulations (IATA Special provision A197)

UN3082

Environmentally hazardous substances, liquid, n.o.s (cloquintocet mexyl)

9

PG III

Marine pollutant

IMDG**UN/ID no****Proper shipping name**

Single or inner packaging less than 5L (liquid) or 5 kg net (solids) are excepted from the Dangerous Goods regulations (IMDG 2.10.2.7)

UN3082

Environmentally hazardous substances, liquid, n.o.s (cloquintocet mexyl)

Hazard class	9
Packing group	PG III
Environmental hazards	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 WARNING

Ventilation Control When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Keep out of Reach of Children. Causes substantial but temporary eye injury. Prolonged or frequent repeated skin contact may cause allergic reaction in some individuals. Toxic to plants and may adversely impact the forage and habitat of non-target organisms in areas adjacent to the treated site. Including pollinators.

International Inventories

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

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

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

CERCLA

CERCLA

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide	FIFRA - Listing of	California Pesticides -
-----------	------------------------	-------------------	--------------------	-------------------------

		Product Other Ingredients	Pesticide Chemicals	Restricted Materials
Flucarbazone sodium 181274-17-9 (19.47)			X	
Cloquintocet mexyl 99607-70-2 (4.87)			X	
Pyroxsulam 422556-08-9 (5.85)			X	

State Regulations**State Right-to-Know****International regulations****U.S. EPA Label information**

EPA Pesticide registration number 70506-629

16. Other Information**NFPA**

HEALTH 1

flammability 0

Instability 0

Physical hazard -

Preparation Date 11-Oct-2023

Revision date 27-Jun-2024

Revision Summary

Update section 2 Update section 11 Update section 14

Disclaimer

UPL NA Inc. believes that the information and recommendations contained 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