



# Safety Data Sheet

Preparation Date 11-Oct-2023

Revision date 20-Mar-2024

Revision Number: 2

## 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

Harmful if inhaled  
May cause an allergic skin reaction



<b>Appearance</b> no data available	<b>Physical state</b> Liquid	<b>Odor</b> characteristic
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**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  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 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-%
Flucarbazone 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**

<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. 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** 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 (CO<sub>2</sub>). 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. Chemical resistant footwear plus socks. Long sleeved clothing.

**Skin protection**

**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

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

<b>Product information</b>	IronGate Acute oral LD50 5,000 mg/kg Acute dermal LD50 >5,000 mg/kg Acute inhalation LC50 >5.01 mg/kg
<b>Inhalation</b>	Based on available data, the classification criteria are not met.
<b>Eye contact</b>	Severely irritating to eyes.
<b>Skin contact</b>	Moderately irritating to the skin.
<b>Ingestion</b>	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**

<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>	5000 mg/kg
<b>LD50 Dermal</b>	> 5000 mg/kg
<b>LC50 Inhalation</b>	> 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**

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

**IMDG**

<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (cloquintocet mexyl)
<b>Hazard class</b>	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/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/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 Product Other	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
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		Ingredients		
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**                      20-Mar-2024

**Revision Summary**

Update section 2 Update section 15

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**End of SDS**