



Safety Data Sheet

Issue Date: 06-Nov-2018

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Version 1

1. IDENTIFICATION

Product identifier

Product Name **Fluroxypyr 180 EC**

Other means of identification

SDS # ADAMA-269

Registration Number(s) Pest Control Reg. No. 30815

Recommended use of the chemical and restrictions on use

Recommended Use Herbicide.

Details of the supplier of the safety data sheet

Manufacturer Address

ADAMA Agricultural Solutions Canada Ltd.
300-191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1-855-264-6262

Emergency telephone number

Emergency Telephone For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact ProPharma Group:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015).

Appearance Amber liquid

Physical state Liquid

Odor mild aromatic

Classification

| | |
|-----------------------------------|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2B |
| Carcinogenicity | Category 2 |
| Flammable liquids | Category 4 |

Signal Word

Warning

Hazard statements

Causes skin irritation
Causes eye irritation
Suspected of causing cancer
Combustible liquid



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of water and soap
 Take off contaminated clothing and wash it before reuse
 If skin irritation occurs: Get medical advice/attention
 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
 Keep out of the reach of children

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Weight-% |
|--|------------|----------|
| 1-Methylheptyl [(4-amino-3,5-dichloro-6-fluoropyridin-2-yl)oxy]acetate | 81406-37-3 | 26.6 |
| N-methyl-2-pyrrolidone | 872-50-4 | 5 |
| Calcium Dodecylbenze Sulfonate | 26264-06-2 | 3 |
| Naphthalene | 91-20-3 | <1 |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|--|
| General Advice | Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention. |
| Eye Contact | Hold eye open and rinse slowly and gently with water for 15 to 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 poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquids to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed**Symptoms**

Causes skin irritation. Causes eye irritation. Suspected of causing cancer.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Combustible material.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). chloride compounds. Fluorine compounds.

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 as required.

Environmental precautions**Environmental precautions**

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on Safe Handling**

Keep out of the reach of children. May irritate skin and eyes. Avoid contact with skin eyes and clothing. Wash concentrate from skin or eyes immediately. Do not inhale fumes. Avoid breathing vapors or spray mist. After use, wash hands and other exposed skin. When using, do not eat, drink or smoke. Remove and launder contaminated clothing separately from household laundry before reuse. Avoid spray drift. Avoid contamination of ponds, streams, rivers and desirable vegetation. Store the container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. Observe appropriate state buffer zones around bodies of water and wetland areas. When handling the concentrate, mixing, loading

or during cleanup and repair, wear goggles or face shield, rubber apron, chemically resistant gloves, rubber boots, long sleeved shirt and long legged pants.

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|---|
| Storage Conditions | Store the container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. |
| Incompatible Materials | Strong oxidizing agents. Acids. Alkalis. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------|-------------------|--|---|
| Naphthalene 91-20-3 | TWA: 10 ppm S* | TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³ | IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³ |

Appropriate engineering controls

| | |
|-----------------------------|--|
| Engineering Controls | Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
|-----------------------------|--|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|--|
| Eye/Face Protection | Wear goggles or face shield. |
| Skin and Body Protection | Rubber apron. Chemically resistant gloves. Rubber boots. Long sleeve shirt and long pants. |
| Respiratory Protection | This material may be a respiratory irritant and, unless ventilation is adequate, the use of approved respiratory protection is recommended. Use this material only in well-ventilated areas. |

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------|-----------------------|----------------|
| Physical state | Liquid | Odor | mild aromatic |
| Appearance | Amber liquid | Odor Threshold | Not determined |
| Color | Amber | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|----------------|-------------------------|
| pH | 5-7 | |
| Melting point / freezing point | Not determined | |
| Boiling point / boiling range | Not determined | |
| Flash point | 61°C / 141.8°F | |
| Evaporation Rate | Not determined | |
| Flammability (Solid, Gas) | Not determined | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | Not determined | |
| Lower flammability or explosive limits | Not determined | |

| | |
|-------------------------------------|----------------|
| Vapor Pressure | Not determined |
| Vapor Density | Not determined |
| Relative Density | 0.95-0.99 g/mL |
| Water Solubility | Not determined |
| Solubility in other solvents | Not determined |
| Partition Coefficient | Not determined |
| Autoignition temperature | Not determined |
| Decomposition temperature | Not determined |
| Kinematic viscosity | Not determined |
| Dynamic Viscosity | Not determined |
| Explosive Properties | Not determined |
| Oxidizing Properties | Not determined |

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under normal conditions. Do not allow product to freeze. Store above 18° F (-8° C).

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Acids. Alkalis.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Chlorides. Fluorine compounds.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes eye irritation.

Skin Contact Causes skin irritation.

Inhalation Do not inhale.

Ingestion Do not ingest.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|--|---|-------------------------------------|
| 1-Methylheptyl [(4-amino-3,5-dichloro-6-fluoropyridin-2-yl)oxy]acetate 81406-37-3 | > 5000 mg/kg (Rat) = 3162 mg/kg (Rat) | = 2 g/kg (Rat) | - |
| N-methyl-2-pyrrolidone 872-50-4 | = 3914 mg/kg (Rat) | = 8 g/kg (Rabbit) | > 5.1 mg/L (Rat) 4 h |
| Calcium Dodecylbenze Sulfonate 26264-06-2 | = 4 g/kg (Rat) 1086 - 1980 mg/kg (Rat) | - | - |
| Naphthalene 91-20-3 | = 1110 mg/kg (Rat) = 490 mg/kg (Rat) | (= 1120 mg/kg (Rabbit) > 20 g/kg (Rabbit) | > 340 mg/m ³ (Rat) 1 h |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity Suspected of causing cancer.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|------------------------|-------|----------|------------------------|------|
| Naphthalene 91-20-3 | A3 | Group 2B | Reasonably Anticipated | X |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

Acute Oral LD50 (Rat): >2,000 mg/kg

Acute Dermal LD50 (Rat): >4,000 mg/kg

Acute Inhalation LC50 (Rat): >5.05 mg/L

Eye Irritation: Severely irritating

Dermal Irritation: Moderately irritating

Dermal Sensitization: Not a contact sensitizer

12. ECOLOGICAL INFORMATION**Ecotoxicity**

This product contains aromatic petroleum distillates which are moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

Component Information

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|--|--|---|---|
| N-methyl-2-pyrrolidone 872-50-4 | 500: 72 h <i>Desmodesmus</i> <i>subspicatus</i> mg/L EC50 | 1400: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 832: 96 h <i>Lepomis</i> <i>macrochirus</i> mg/L LC50 static 1072: 96 h <i>Pimephales promelas</i> mg/L LC50 static 4000: 96 h <i>Leuciscus</i> <i>idus</i> mg/L LC50 static | 4897: 48 h <i>Daphnia magna</i> mg/L EC50 |
| Calcium Dodecylbenze Sulfonate 26264-06-2 | | 10.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static | |
| Naphthalene 91-20-3 | 0.4: 72 h <i>Skeletonema costatum</i> mg/L EC50 | 0.91 - 2.82: 96 h <i>Oncorhynchus</i> <i>mykiss</i> mg/L LC50 static 31.0265: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 1.6: 96 h <i>Oncorhynchus</i> <i>mykiss</i> mg/L LC50 flow-through 5.74 - 6.44: 96 h <i>Pimephales</i> <i>promelas</i> mg/L LC50 flow-through 1.99: 96 h <i>Pimephales promelas</i> mg/L LC50 static | 1.09 - 3.4: 48 h <i>Daphnia magna</i> mg/L EC50 Static 1.96: 48 h <i>Daphnia magna</i> mg/L EC50 Flow through 2.16: 48 h <i>Daphnia magna</i> mg/L LC50 |

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

| Chemical name | Partition coefficient |
|------------------------------------|-----------------------|
| N-methyl-2-pyrrolidone 872-50-4 | -0.46 |
| Naphthalene 91-20-3 | 3.6 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

Contaminated Packaging

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

US EPA Waste Number

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|------------------------|------|--|------------------------|------------------------|
| Naphthalene 91-20-3 | U165 | Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145 | | U165 |

| Chemical name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|------------------------|--------------------------------------|------------------------|--|------------------------|
| Naphthalene 91-20-3 | | | Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. | |

California Hazardous Waste Status

| Chemical name | California Hazardous Waste Status |
|------------------------|-----------------------------------|
| Naphthalene 91-20-3 | Toxic |

14. TRANSPORT INFORMATION

Note According to 49 CFR §173.150(f)(1), this material should be reclassified as "NA1993, Combustible Liquid, N.O.S." if it is shipped in bulk.

DOT Not regulated

IATA

UN number UN3082
Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s. (Fluroxypyr-methyl, naphtha)
Transport hazard class(es) 9
Packing Group III
Description Yes

IMDG

UN number UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Fluroxypyr-methyl, naphtha)
Transport hazard class(es) 9
Packing Group III
Marine Pollutant Yes

TDG Not regulated

15. REGULATORY INFORMATION

International Inventories

| Chemical name | TSCA | DSL/NDSL | EINECS/E LINC S | ENCS | IECSC | KECL | PICCS | AICS |
|--|------|----------|-----------------|------|-------|------|-------|------|
| 1-Methylheptyl [(4-amino-3,5-dichloro-6-fluoropyridin-2-yl)oxy]acetate | X | | X | | | | | |
| N-methyl-2-pyrrolidone | X | X | X | X | X | X | X | X |
| Calcium Dodecylbenze Sulfonate | X | X | X | X | X | X | X | X |
| Naphthalene | X | X | X | X | X | X | X | X |

Legend:

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

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

EINECS/ELINC S - European Inventory of Existing Chemical Substances/European 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

US Federal Regulations

CERCLA

Does not apply

SARA 313

Not applicable

CWA (Clean Water Act)

Does not apply

US State Regulations**California Proposition 65**

Not applicable.

U.S. State Right-to-Know Regulations

Not applicable

Pesticide Registration Number Pest Control Reg. No. 30815**Product Statement**

This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product. Following is the hazard information as required on the pesticide label:

Pesticide Label

Warning- Skin and eye irritant

Difference between SDS and pesticide label

| | PCPA | SDS |
|-----------------------------------|---------------|-------------------------------|
| Signal Word | Warning | Warning |
| Skin corrosion/irritation | Skin irritant | Causes skin irritation |
| Serious eye damage/eye irritation | Eye irritant | Causes serious eye irritation |
| Carcinogenicity | N/A | Suspected of causing cancer |

16. OTHER INFORMATION**NFPA****Health Hazards**

2

Flammability

2

Instability

0

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

Not determined

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet