

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : BATALIUM™ Herbicide
 Other means of identification : EPA Reg. No. 66330-434

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Herbicide
 Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience North America, LLC
 15401 Weston Parkway, Suite 150
 Cary, NC 27513 - USA
 T 1-866-761-9397

1.4. Emergency telephone number

Emergency number : Exposure calls (PROPHARMA): 1-866-303-6952 or +1-651-603-3432 (international)
 Spill calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887 (international)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Inhalation:dust,mist)	H332
Skin Irrit. 2	H315
Eye Irrit. 2B	H320
Skin Sens. 1	H317
Repr. 2	H361
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H302+H332 - Harmful if swallowed or if inhaled
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H320 - Causes eye irritation
 H361 - Suspected of damaging fertility or the unborn child.
 H373 - May cause damage to organs through prolonged or repeated exposure.
 H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P260 - Do not breathe mist, vapours, spray.
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area.
 P272 - Contaminated work clothing must not be allowed out of the workplace
 P273 - Avoid release to the environment.

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P280 - Wear eye protection, protective gloves, protective clothing.
P301+P312 - If swallowed: Call a doctor if you feel unwell
P302+P352 - If on skin: Wash with plenty of soap and water
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see First aid measures on this label)
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

2% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
2% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
2% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% (w/w)	GHS-US classification
bromoxynil octanoate (Active)	(CAS-No.) 1689-99-2	35.17	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Sens. 1, H317 Repr. 2, H361 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Surfactant	(CAS-No.) trade secret	20 – 25	Eye Irrit. 2B, H320
fluroxypyr-meptyl (ISO) (Active)	(CAS-No.) 81406-37-3	13.03	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Alcohol, C10-12, ethoxylated propoxylated	(CAS-No.) 68154-97-2	3 – 7	Eye Irrit. 2A, H319
Surface active agent	(CAS-No.) trade secret	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Polymeric ester	(CAS-No.) trade secret	1 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318
Flucarbazone sodium (Active)	(CAS-No.) 181274-17-9	2.59	Not classified
Petroleum distillates	(CAS-No.) trade secret	1 – 2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Safener	(CAS-No.) trade secret	0.52	Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

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First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of water/... Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Burning produces irritating, toxic and noxious fumes.
Reactivity	: No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required. Ensure adequate ventilation.
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6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid all eye and skin contact and do not breathe vapour and mist.
- Hygiene measures : Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container. Keep container tightly closed.
- Incompatible products : Strong bases. Strong acids. Strong oxidizers.
- Incompatible materials : Sources of ignition. Direct sunlight.
- Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BATALIUM™ Herbicide	
ACGIH	Not applicable
OSHA	Not applicable
Flucarbazone sodium (181274-17-9)	
ACGIH	Not applicable
OSHA	Not applicable
fluroxypyr-meptyl (ISO) (81406-37-3)	
ACGIH	Not applicable
OSHA	Not applicable
bromoxynil octanoate (1689-99-2)	
ACGIH	Not applicable
OSHA	Not applicable
Safener (trade secret)	
ACGIH	Not applicable
OSHA	Not applicable
Surface active agent (trade secret)	
ACGIH	Not applicable
OSHA	Not applicable
Surfactant (trade secret)	
ACGIH	Not applicable
OSHA	Not applicable
Polymeric ester (trade secret)	
ACGIH	Not applicable
OSHA	Not applicable
Petroleum distillates (trade secret)	
ACGIH	Not applicable
OSHA	Not applicable

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Alcohol, C10-12, ethoxylated propoxylated (68154-97-2)

ACGIH	Not applicable
OSHA	Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid splashing. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear suitable gloves resistant to chemical penetration. barrier laminate. Butyl rubber. Nitrile rubber. neoprene. Natural rubber. Polyethylene. PVC. Viton. (>= 14 mils)

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Gray
Odour	: mild characteristic
Odour threshold	: No data available
pH	: 4-7 (1% solution)
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Density	: 9.68 lb/gal @ 20 °C
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available

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Viscosity, dynamic : 150 – 600 cP @ 20 °C

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

BATALIUM™ Herbicide	
LD50 oral rat	1030 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 2.14 mg/l/4h
ATE US (oral)	1030 mg/kg bodyweight
ATE US (dust,mist)	2.005 mg/l/4h
Flucarbazon sodium (181274-17-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 5.13 mg/l/4h
fluroxypyr-meptyl (ISO) (81406-37-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
bromoxynil octanoate (1689-99-2)	
LD50 oral rat	238 mg/kg female, 400 mg/kg male
LD50 dermal rabbit	1310 mg/kg female; > 2000 mg/kg male
LC50 inhalation rat (mg/l)	0.72 mg/l/4h female; 0.81 mg/l/4h male
ATE US (oral)	238 mg/kg bodyweight
ATE US (dermal)	1310 mg/kg bodyweight
ATE US (vapours)	0.72 mg/l/4h
ATE US (dust,mist)	0.72 mg/l/4h
Safener (trade secret)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 0.935 mg/l/4h
ATE US (gases)	700 ppmv/4h
ATE US (vapours)	3 mg/l/4h
ATE US (dust,mist)	0.5 mg/l/4h
Surface active agent (trade secret)	
LD50 oral rat	501 - 1000 mg/kg
LD50 dermal rat	> 2000 mg/kg female

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Surface active agent (trade secret)	
ATE US (oral)	501 mg/kg bodyweight
Surfactant (trade secret)	
LD50 oral rat	> 5000 mg/kg No mortality observed
LD50 dermal rabbit	> 2000 mg/kg Read-across category approach, no mortality observed
Polymeric ester (trade secret)	
LD50 oral rat	> 3000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg male
Petroleum distillates (trade secret)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
Alcohol, C10-12, ethoxylated propoxylated (68154-97-2)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

Flucarbazone sodium (181274-17-9)	
LC50 fish 1	> 96.7 mg/l 96 h oncorhynchus mykiss
LC50 other aquatic organisms 1	6.4 mg/l 96 h green algae
EC50 Daphnia 1	38.8 mg/l 48 h
LC50 fish 2	> 99.3 mg/l 96 h bluehill
fluroxypyr-meptyl (ISO) (81406-37-3)	
LC50 fish 1	13.4 - 100 mg/l 96 h Rainbow trout
LC50 other aquatic organisms 1	> 100 mg/l 96h Onchorhynchus mykiss, Leuciscus idus
EC50 Daphnia 1	> 0.183 mg/l 48 h; > 100 mg/l 96-hr
LC50 fish 2	> 14.3 mg/l 96 h Blue gill sunfish
NOEC (chronic)	0.06 mg/l 21 day Daphnia magna
NOEC chronic fish	0.2 mg/l 21 day Onchorhynchus mykiss
Additional ecotoxicological information	solubility limit : > 0.9 mg/l
bromoxynil octanoate (1689-99-2)	
LC50 fish 1	0.041 mg/l 96 h Rainbow trout
EC50 Daphnia 1	0.046 mg/l 48 h
EC50 other aquatic organisms 1	0.043 mg/l 120 h, Algae (Navicula)
LC50 fish 2	0.06 mg/l 96 h Bluegill
EC50 other aquatic organisms 2	0.22 mg/l 120 h, Algae (Selenastrum)

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Safener (trade secret)	
LC50 fish 1	> 0.97 ppm 96 h Rainbow trout
EC50 Daphnia 1	> 0.82 ppm 48 h
NOEC (acute)	3.74 mg/l

Surface active agent (trade secret)	
LC50 fish 1	1.1 mg/l 96 h
EC50 Daphnia 1	7.07 mg/l 48 h
EC50 other aquatic organisms 1	>= 10 mg/l 72 h
LC50 fish 2	1 - 10 mg/l 96 h

Polymeric ester (trade secret)	
LC50 fish 1	27 mg/l 96 h
EC50 Daphnia 1	6.6 mg/l 48 h
EC50 Daphnia 2	10.3 mg/l 48 h

Petroleum distillates (trade secret)	
LC50 fish 1	25 mg/l 96 h Oncorhynchus mykiss
EC50 Daphnia 1	1.4 mg/l 48 h

Alcohol, C10-12, ethoxylated propoxylated (68154-97-2)	
LC50 fish 1	2.3 mg/l 96 h
EC50 Daphnia 1	2.6 mg/l 48 h

12.2. Persistence and degradability

BATALIUM™ Herbicide	
Persistence and degradability	Not established.

fluroxypyr-meptyl (ISO) (81406-37-3)	
Persistence and degradability	Not expected to persist.

bromoxynil octanoate (1689-99-2)	
Persistence and degradability	Not expected to persist.

Safener (trade secret)	
Persistence and degradability	Not readily biodegradable.

Surfactant (trade secret)	
Persistence and degradability	Readily biodegradable.
Biodegradation	75 % 29 d

Polymeric ester (trade secret)	
Biodegradation	100 % 28 d

Alcohol, C10-12, ethoxylated propoxylated (68154-97-2)	
Persistence and degradability	inherently biodegradable.

12.3. Bioaccumulative potential

BATALIUM™ Herbicide	
Bioaccumulative potential	Not established.

Flucarbazon sodium (181274-17-9)	
Bioconcentration factor (BCF REACH)	3 (estimated)

Safener (trade secret)	
Bioconcentration factor (BCF REACH)	877

Surfactant (trade secret)	
BCF fish 1	2.41
Log Pow	> 6.2

12.4. Mobility in soil

Flucarbazon sodium (181274-17-9)	
Mobility in soil	mobile in soil; Koc = 36 (estimated)

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fluroxypyr-meptyl (ISO) (81406-37-3)

Ecology - soil : Slightly mobile in soil.

bromoxynil octanoate (1689-99-2)

Ecology - soil : Very mobile.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s. (bromoxynil octanoate, fluroxypyr-meptyl (ISO)), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.
bromoxynil octanoate, fluroxypyr-meptyl (ISO)

Transport hazard class(es) (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



Dangerous for the environment : Yes

Marine pollutant : Yes

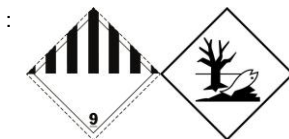


Other information : Non-bulk (<= 119 gallons / 450 Liters) Not Regulated; Bulk (> 119 gallons / 450 Liters) Regulated as stated.

Transport by sea

IMDG

Transport hazard class(es) (IMDG) : 9



Marine pollutant : Yes

UN-No. (IMDG) : 3082

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil octanoate, fluroxypyr-meptyl (ISO)), 9, III, MARINE POLLUTANT

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG) : III - substances presenting low danger

EmS-No. (Fire) : F-A


EmS-No. (Spillage) : S-F

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Air transport

IATA	
Transport hazard class(es) (IATA)	: 9 :
	
Marine pollutant	: Yes
UN-No. (IATA)	: 3082
Transport document description (IATA)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil octanoate, fluroxypyr-meptyl (ISO)), 9, III
Class (IATA)	: 9 - Miscellaneous Dangerous Goods
Packing group (IATA)	: III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

bromoxynil octanoate	CAS-No. 1689-99-2	35.17%
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Flucarbazon sodium (181274-17-9)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	Exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.
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fluroxypyr-meptyl (ISO) (81406-37-3)

EPA TSCA Regulatory Flag	Exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.
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bromoxynil octanoate (1689-99-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Safener (trade secret)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surface active agent (trade secret)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under Chemical Data Reporting Rule (formerly the Inventory Update Reporting Rule), i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 711).
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Surfactant (trade secret)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Polymeric ester (trade secret)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Petroleum distillates (trade secret)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Alcohol, C10-12, ethoxylated propoxylated (68154-97-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under Chemical Data Reporting Rule (formerly the Inventory Update Reporting Rule), i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 711).
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FIFRA Labelling

EPA Registration Number	66330-434
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This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use..

FIFRA Signal Word	Caution
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FIFRA Labelling	
FIFRA Human Health Hazards	Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
FIFRA First Aid	Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.
FIFRA Environmental Hazards	Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate. Do not allow sprays to drift onto adjacent desirable plants.
FIFRA Physical Hazard	Do not mix or come into contact with oxidizing agents. Hazardous chemical reaction may occur.

15.2. International regulations

CANADA

Flucarbazone sodium (181274-17-9)
Not listed on the Canadian DSL (Domestic Substances List) inventory.
fluroxypyr-meptyl (ISO) (81406-37-3)
Not listed on the Canadian DSL (Domestic Substances List) inventory.
bromoxynil octanoate (1689-99-2)
Listed on the Canadian NDSL (Non-Domestic Substances List)
Safener (trade secret)
Not listed on the Canadian DSL (Domestic Substances List) inventory.
Surface active agent (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Surfactant (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Polymeric ester (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Alcohol, C10-12, ethoxylated propoxylated (68154-97-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.

15.3. US State regulations

⚠ WARNING: This product can expose you to Silicon dioxide (cristobalite), which is known to the State of California to cause cancer, and bromoxynil octanoate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
bromoxynil octanoate(1689-99-2)		X				
Silicon dioxide (cristobalite)(14808-60-7)	X					

Component	State or local regulations
bromoxynil octanoate(1689-99-2)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date : 07/24/2018

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Other information : None.

Full text of H-statements:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation, Category 2B
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

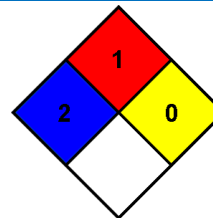
	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	TSCA: Toxic Substances Control Act

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NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



Indication of changes:

Product identifier. Regulatory information.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product