

SAFETY DATA SHEET

according to the Hazardous Products Regulations



STELLAR™ XL Herbicide

Version 2.0 Revision Date: 11/16/2023 SDS Number: 800080005351 Date of last issue: 03/24/2023
Date of first issue: 03/24/2023

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

SECTION 1. IDENTIFICATION

Product name : STELLAR™ XL Herbicide
Other means of identification : No data available

Manufacturer or supplier's details

COMPANY IDENTIFICATION

Manufacturer/importer : CORTEVA AGRISCIENCE CANADA COMPANY
SUITE 240, 115 QUARRY PARK RD. SE
CALGARY AB, T2C 5G9
CANADA

Customer Information Number : 800-667-3852
E-mail address : solutions@corteva.com

Emergency telephone number : Corteva Canada Solutions
1-800-667-3852

Recommended use of the chemical and restrictions on use

Recommended use : End use herbicide product

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Eye irritation : Category 2B

Skin sensitisation : Sub-category 1B

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H320 Causes eye irritation.

Precautionary statements : **Prevention:**
P261 Avoid breathing mist or vapours.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.

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Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
MCPA 2-ethylhexyl ester	MCPA 2-ethylhexyl ester	29450-45-1	51.9
fluroxypyr-meptyl (ISO)	fluroxypyr-meptyl (ISO)	81406-37-3	13.7
florasulam (ISO)	florasulam (ISO)	145701-23-1	0.24
N,N-Dimethyloctanamide	N,N-Dimethyloctanamide	1118-92-9	>= 10 - < 20 *
N,N-Dimethyldecan-1-amide	N,N-Dimethyldecan-1-amide	14433-76-2	>= 3 - < 10 *
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts	Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts	68953-96-8	>= 3 - < 10 *
Hydrocarbons, C10, aromatics, <1% naphthalene	Hydrocarbons, C10, aromatics, <1% naphthalene	1189173-42-9	>= 3 - < 10 *

* Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled : Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

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In case of skin contact	:	Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly. Suitable emergency safety shower facility should be available in work area.	
In case of eye contact	:	Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.	
If swallowed	:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.	
Most important symptoms and effects, both acute and delayed	:	None known.	
Protection of first-aiders	:	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.	
Notes to physician	:	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam
Unsuitable extinguishing media	:	None known.
Specific hazards during fire-fighting	:	Exposure to combustion products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon oxides Hydrogen chloride gas Sulphur oxides Hydrogen fluoride
Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

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Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
Prevent from entering into soil, ditches, sewers, underwater.
See Section 12, Ecological Information.

Methods and materials for containment and cleaning up : Clean up remaining materials from spill with suitable absorbant.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped,
Recovered material should be stored in a vented container.
The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurization of the container.
Keep in suitable, closed containers for disposal.
Wipe up with absorbent material (e.g. cloth, fleece).
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
See Section 13, Disposal Considerations, for additional information.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Do not breathe vapours/dust.
Do not smoke.
Handle in accordance with good industrial hygiene and safety practice.

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- Avoid exposure - obtain special instructions before use.
Smoking, eating and drinking should be prohibited in the application area.
Do not get on skin or clothing.
Avoid inhalation of vapour or mist.
Do not swallow.
Do not get in eyes.
Avoid contact with skin and eyes.
Take care to prevent spills, waste and minimize release to the environment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
- Conditions for safe storage : Store in a closed container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in properly labelled containers.
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store near acids.
Strong oxidizing agents
- Packaging material : Unsuitable material: None known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
fluroxypyr-meptyl (ISO)	81406-37-3	TWA	10 mg/m3	Dow IHG

- Engineering measures** : Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.
Local exhaust ventilation may be necessary for some operations.

Personal protective equipment

- Respiratory protection : Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.
- Hand protection : Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors
- Remarks :

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such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Eye protection : Use chemical goggles.
Skin and body protection : Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid.
Colour	: Yellow
Odour	: Solvent
Odour Threshold	: No data available
pH	: 4.06 (23.5 °C) Method: pH Electrode
Melting point/range	: Not applicable
Freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: > 100 °C Method: closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.0546 g/cm ³ (20 °C) Method: Digital density meter
Solubility(ies) Water solubility	: No data available
Auto-ignition temperature	: No data available

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Viscosity		
Viscosity, dynamic	:	61.4 mPa,s (20 °C)
		21 mPa,s (40 °C)
Explosive properties	:	No
Oxidizing properties	:	No significant increase (>5C) in temperature.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	No decomposition if stored and applied as directed. Stable under normal conditions.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. No hazards to be specially mentioned. None known.
Conditions to avoid	:	None known.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon oxides Sulphur oxides Hydrogen chloride gas Hydrogen fluoride

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, female): > 2,000 - < 5,000 mg/kg Method: OECD Test Guideline 423
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 6.16 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Symptoms: No deaths occurred at this concentration. Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402

Components:

MCPA 2-ethylhexyl ester:

Acute oral toxicity	:	LD50 (Rat): 1,793 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 4.5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Symptoms: No deaths occurred at this concentration. Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Maximum attainable concentration.

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Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
GLP: yes

fluroxypyr-meptyl (ISO):

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.16 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Maximum attainable concentration.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

florasulam (ISO):

Acute oral toxicity : LD50 (Rat): > 6,000 mg/kg
LD50 (Mouse): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.0 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

N,N-Dimethyloctanamide:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 3.551 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: For similar material(s):

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

N,N-Dimethyldecan-1-amide:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 - 5,000 mg/kg

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Acute inhalation toxicity : LC50 (Rat, male and female): > 3.551 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Maximum attainable concentration.

Acute dermal toxicity : LD50 (Rat): > 2,000 - 5,000 mg/kg

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD 401 or equivalent
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute oral toxicity
Remarks: For similar material(s):

Acute dermal toxicity : LD50 (Rat, male and female): > 1,000 - < 1,600 mg/kg
Method: OECD 402 or equivalent
Remarks: For similar material(s):

Hydrocarbons, C10, aromatics, <1% naphthalene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: For similar material(s):

Acute inhalation toxicity : LC50 (Rat): > 4.688 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: For similar material(s):
Maximum attainable concentration.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: For similar material(s):

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritation

Components:

MCPA 2-ethylhexyl ester:

Result : Mild skin irritation

fluroxypyr-meptyl (ISO):

Species : Rabbit
Result : No skin irritation

N,N-Dimethyloctanamide:

Result : Skin irritation

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N,N-Dimethyldecan-1-amide:

Result : Skin irritation

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Species : Rabbit
Result : Skin irritation

Serious eye damage/eye irritation

Product:

Species : Rabbit
Result : Mild eye irritation
Method : OECD Test Guideline 405

Components:

MCPA 2-ethylhexyl ester:

Result : No eye irritation

N,N-Dimethyloctanamide:

Result : Corrosive

N,N-Dimethyldecan-1-amide:

Result : Eye irritation

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Result : Corrosive

Respiratory or skin sensitisation

Product:

Test Type : Local lymph node assay
Species : Mouse
Assessment : The product is a skin sensitiser, sub-category 1B.
Method : OECD Test Guideline 429

Components:

MCPA 2-ethylhexyl ester:

Assessment : Does not cause skin sensitisation.
Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

fluroxypyr-meptyl (ISO):

Species : Guinea pig
Assessment : Does not cause skin sensitisation.

florasulam (ISO):

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

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N,N-Dimethyloctanamide:

Remarks : For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

N,N-Dimethyldecan-1-amide:

Assessment : Does not cause skin sensitisation.

Remarks : For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Remarks : For skin sensitization:
For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Remarks : For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Germ cell mutagenicity

Components:

MCPA 2-ethylhexyl ester:

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

fluroxypyr-meptyl (ISO):

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

florasulam (ISO):

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

N,N-Dimethyloctanamide:

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

N,N-Dimethyldecan-1-amide:

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

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Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Germ cell mutagenicity - Assessment : For similar material(s);, In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Germ cell mutagenicity - Assessment : For similar material(s);, In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Carcinogenicity

Components:

MCPA 2-ethylhexyl ester:

Carcinogenicity - Assessment : For similar active ingredient(s);, 2-methyl-4-chlorophenoxyacetic acid (MCPA);, Did not cause cancer in laboratory animals.

fluroxypyr-meptyl (ISO):

Carcinogenicity - Assessment : For similar active ingredient(s);, Fluroxypyr.;, Did not cause cancer in laboratory animals.

florasulam (ISO):

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

N,N-Dimethyloctanamide:

Carcinogenicity - Assessment : Similar material(s) did not cause cancer in laboratory animals.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Carcinogenicity - Assessment : Contains naphthalene which has caused cancer in some laboratory animals.;, However, the relevance of this to humans is unknown.

Reproductive toxicity

Components:

MCPA 2-ethylhexyl ester:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Has caused birth defects in laboratory animals only at doses toxic to the mother.;, Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

fluroxypyr-meptyl (ISO):

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Has been toxic to the fetus in laboratory animals at doses toxic to the mother.;, Did not cause birth defects in laboratory animals.

florasulam (ISO):

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

N,N-Dimethyloctanamide:

Reproductive toxicity - Assessment : No relevant data found. For similar material(s);, Has been toxic to the fetus in laboratory animals at doses toxic to the mother.;, Did not cause birth defects in laboratory animals.

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N,N-Dimethyldecan-1-amide:

Reproductive toxicity - Assessment : For similar material(s); Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Did not cause birth defects in laboratory animals.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Reproductive toxicity - Assessment : For similar material(s); In animal studies, did not interfere with reproduction.

For similar material(s); Did not cause birth defects or any other fetal effects in laboratory animals.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.

For similar material(s); Did not cause birth defects or any other fetal effects in laboratory animals.

STOT - single exposure

Product:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Components:

MCPA 2-ethylhexyl ester:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

N,N-Dimethyloctanamide:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

N,N-Dimethyldecan-1-amide:

Assessment : May cause respiratory irritation.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Exposure routes : Inhalation

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure

Product:

Assessment : Evaluation of available data suggests that this material is not an STOT-RE toxicant.

Repeated dose toxicity

Components:

MCPA 2-ethylhexyl ester:

Remarks : For similar material(s):
2-methyl-4-chlorophenoxyacetic acid (MCPA).
In animals, effects have been reported on the following organs:
Blood.
Kidney.
Liver.
Testes.

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fluroxypyr-meptyl (ISO):

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

florasulam (ISO):

Remarks : In animals, effects have been reported on the following organs:
Kidney.

N,N-Dimethyloctanamide:

Remarks : Based on information for a similar material:
In animals, effects have been reported on the following organs:
Kidney.
Eye.

N,N-Dimethyldecan-1-amide:

Remarks : For similar material(s):
In animals, effects have been reported on the following organs:
Eye.
Liver.
Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Remarks : For similar material(s):
In animals, effects have been reported on the following organs:
Kidney.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Remarks : Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Aspiration toxicity

Product:

Based on physical properties, not likely to be an aspiration hazard.

Components:

MCPA 2-ethylhexyl ester:

Based on available information, aspiration hazard could not be determined.

fluroxypyr-meptyl (ISO):

Based on physical properties, not likely to be an aspiration hazard.

florasulam (ISO):

Based on physical properties, not likely to be an aspiration hazard.

N,N-Dimethyloctanamide:

Based on physical properties, not likely to be an aspiration hazard.

N,N-Dimethyldecan-1-amide:

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

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Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Based on physical properties, not likely to be an aspiration hazard.

Hydrocarbons, C10, aromatics, <1% naphthalene:

May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

MCPA 2-ethylhexyl ester:

Toxicity to fish : Remarks: Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.50 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.29 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): 0.17 mg/l
End point: Growth inhibition (cell density reduction)
Exposure time: 96 h

EC50 (Lemna minor (duckweed)): 0.13 mg/l
Exposure time: 14 d

Toxicity to terrestrial organisms : Remarks: Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm)., Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

oral LD50 (Colinus virginianus (Bobwhite quail)): > 2,250 mg/kg > 2250 mg/kg bodyweight.
Exposure time: 14 d
GLP: yes

dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5620 mg/kg diet.
Exposure time: 5 d
GLP: yes

Ecotoxicology Assessment

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

fluroxypyr-meptyl (ISO):

Toxicity to fish : Remarks: Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.225 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203 or Equivalent

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- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0.183 mg/l
Exposure time: 48 h
Test Type: semi-static test
Method: OECD Test Guideline 202 or Equivalent
- Toxicity to algae/aquatic plants : ErC50 (diatom Navicula sp.): 0.24 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent
- EbC50 (alga Scenedesmus sp.): > 0.47 mg/l
Exposure time: 72 h
- ErC50 (Selenastrum capricornutum (green algae)): > 1.410 mg/l
Exposure time: 96 h
- ErC50 (Myriophyllum spicatum): 0.075 mg/l
Exposure time: 14 d
- NOEC (Myriophyllum spicatum): 0.031 mg/l
Exposure time: 14 d
- Toxicity to fish (Chronic toxicity) : NOEC (Rainbow trout (Oncorhynchus mykiss)): 0.32 mg/l
- Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
- Toxicity to terrestrial organisms : Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg)., Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).
- oral LD50 (Colinus virginianus (Bobwhite quail)): > 2000 mg/kg bodyweight.
Exposure time: 5 d
- dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5000 mg/kg diet.
- oral LD50 (Apis mellifera (bees)): > 100 micrograms/bee
Exposure time: 48 h
- contact LD50 (Apis mellifera (bees)): > 100 micrograms/bee
Exposure time: 48 h
- florasulam (ISO):**
- Toxicity to fish : Remarks: Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).
- LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203 or Equivalent
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 292 mg/l
Exposure time: 48 h
Test Type: static test

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Toxicity to algae/aquatic plants	:	Method: OECD Test Guideline 202 or Equivalent ErC50 (<i>Pseudokirchneriella subcapitata</i> (green algae)): 0.00894 mg/l End point: Growth rate inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 or Equivalent EC50 (<i>Myriophyllum spicatum</i>): > 0.305 mg/l End point: Growth inhibition Exposure time: 14 d
M-Factor (Acute aquatic toxicity)	:	100
Toxicity to fish (Chronic toxicity)	:	NOEC (<i>Oncorhynchus mykiss</i> (rainbow trout)): 119 mg/l End point: mortality Exposure time: 28 d Test Type: flow-through test NOEC (<i>Pimephales promelas</i> (fathead minnow)): > 2.9 mg/l End point: Other Exposure time: 33 d Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (<i>Daphnia magna</i> (Water flea)): 38.90 mg/l End point: growth Exposure time: 21 d Test Type: semi-static test MATC (Maximum Acceptable Toxicant Level) (<i>Daphnia magna</i> (Water flea)): 50.2 mg/l End point: growth Exposure time: 21 d Test Type: semi-static test
M-Factor (Chronic aquatic toxicity)	:	100
Toxicity to soil dwelling organisms	:	LC50 (<i>Eisenia fetida</i> (earthworms)): > 1,320 mg/kg Exposure time: 14 d
Toxicity to terrestrial organisms	:	Remarks: Material is slightly toxic to birds on an acute basis (LD50 between 501 and 2000 mg/kg)., Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm). oral LD50 (<i>Coturnix japonica</i> (Japanese quail)): 1047 mg/kg bodyweight. dietary LC50 (<i>Anas platyrhynchos</i> (Mallard duck)): > 5,000 ppm Exposure time: 8 d oral LD50 (<i>Apis mellifera</i> (bees)): > 100 micrograms/bee Exposure time: 48 h contact LD50 (<i>Apis mellifera</i> (bees)): > 100 micrograms/bee Exposure time: 48 h

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N,N-Dimethyloctanamide:

- Toxicity to fish : LC50 (Danio rerio (zebra fish)): 14.8 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 7.7 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 16.06 mg/l
Exposure time: 72 h

Ecotoxicology Assessment

- Acute aquatic toxicity : Toxic to aquatic life.

N,N-Dimethyldecan-1-amide:

- Toxicity to fish : LC50 (Danio rerio (zebra fish)): 14.8 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 7.7 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 16.06 mg/l
Exposure time: 72 h
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.079 mg/l
Exposure time: 21 d

Ecotoxicology Assessment

- Acute aquatic toxicity : Toxic to aquatic life.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

- Toxicity to fish : Remarks: Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

LC50 (zebra fish (Brachydanio rerio)): 31.6 mg/l
Exposure time: 96 h
Remarks: For similar material(s):
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 62 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Selenastrum capricornutum (green algae)): 29 mg/l
End point: Growth rate inhibition
Exposure time: 96 h
Remarks: For similar material(s):
- Toxicity to fish (Chronic toxicity) : NOEC (Rainbow trout (Salmo gairdneri)): 0.23 mg/l
End point: survival
Exposure time: 72 d
Remarks: For similar material(s):

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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.18 mg/l
End point: number of offspring
Exposure time: 21 d
Remarks: For similar material(s):

Toxicity to microorganisms : EC50 (activated sludge): 550 mg/l
End point: Respiration rates.
Exposure time: 3 h
Remarks: For similar material(s):

Hydrocarbons, C10, aromatics, <1% naphthalene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l
Exposure time: 96 h
Remarks: For similar material(s):

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 3 - 10 mg/l
Exposure time: 48 h
Remarks: For similar material(s):

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 11 mg/l
Exposure time: 72 h
Remarks: For similar material(s):

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

MCPA 2-ethylhexyl ester:

Stability in water : Test Type: Hydrolysis
Degradation half life (half-life): 76 d (25 °C) pH: 7
Method: Measured

Test Type: Hydrolysis
Degradation half life (half-life): 117 d (25 °C) pH: 9
Method: Measured

fluroxypyr-meptyl (ISO):

Biodegradability : Result: Not biodegradable
Remarks: Material is not readily biodegradable according to OECD/EEC guidelines.

Biodegradation: 32 %
Exposure time: 28 d
Method: OECD Test Guideline 301D or Equivalent
Remarks: 10-day Window: Fail

ThOD : 2.2 kg/kg

Stability in water : Test Type: Hydrolysis
Degradation half life: 454 d

florasulam (ISO):

Biodegradability : Result: Not biodegradable

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Remarks: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

Biodegradation: 2 %

Exposure time: 28 d

Method: OECD Test Guideline 301B or Equivalent

Remarks: 10-day Window: Fail

Biochemical Oxygen Demand (BOD) : 0.012 kg/kg
Incubation time: 5 d

ThOD : 0.85 kg/kg

Stability in water : Degradation half life: > 30 d

Photodegradation : Rate constant: 7.04E-11 cm³/s
Method: Estimated.

N,N-Dimethyloctanamide:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 80 %
Exposure time: 28 d
Method: OECD Test Guideline 301F or Equivalent
Remarks: 10-day Window: Pass
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Chemical Oxygen Demand (COD) : 2.890 kg/kg

ThOD : 2.85 kg/kg

N,N-Dimethyldecan-1-amide:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 66.12 %
Exposure time: 11 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Biodegradability : Biodegradation: 2.9 %
Exposure time: 28 d
Method: OECD Test Guideline 301E or Equivalent
Remarks: 10-day Window: Fail

Hydrocarbons, C10, aromatics, <1% naphthalene:

Biodegradability : Remarks: Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

Bioaccumulative potential

Components:

MCPA 2-ethylhexyl ester:

Bioaccumulation : Bioconcentration factor (BCF): 11,250

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Partition coefficient: n-octanol/water : Remarks: Expected to be relatively immobile in soil (Koc > 5000).
Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).
log Pow: 6.17
Method: Estimated.

fluroxypyr-meptyl (ISO):

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): 26
Method: Measured

Partition coefficient: n-octanol/water :
log Pow: 5.04
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

florasulam (ISO):

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 0.8
Exposure time: 28 d
Temperature: 13 °C
Method: Measured

Partition coefficient: n-octanol/water :
log Pow: -1.22
pH: 7.0
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

N,N-Dimethyloctanamide:

Partition coefficient: n-octanol/water : log Pow: 2.59 (23 °C)
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

N,N-Dimethyldecan-1-amide:

Partition coefficient: n-octanol/water : log Pow: 3.44
Method: Estimated.
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Partition coefficient: n-octanol/water : log Pow: 4.6
Method: OECD Test Guideline 107 or Equivalent
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Hydrocarbons, C10, aromatics, <1% naphthalene:

Partition coefficient: n-octanol/water : Remarks: No data available for this product.
For similar material(s):
Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Mobility in soil

Components:

MCPA 2-ethylhexyl ester:

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Distribution among environmental compartments : Koc: 10500
Method: Estimated.
Remarks: Expected to be relatively immobile in soil (Koc > 5000).

Stability in soil : Dissipation time: 2 - 12 h
Method: Measured

fluroxypyr-meptyl (ISO):

Distribution among environmental compartments : Koc: 6200 - 43000
Remarks: Expected to be relatively immobile in soil (Koc > 5000).

florasulam (ISO):

Distribution among environmental compartments : Koc: 4 - 54
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

Stability in soil : Dissipation time: 0.7 - 4.5 d

N,N-Dimethyloctanamide:

Distribution among environmental compartments : Remarks: No relevant data found.

N,N-Dimethyldecan-1-amide:

Distribution among environmental compartments : Koc: 351 - 630
Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Distribution among environmental compartments : Remarks: No relevant data found.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Distribution among environmental compartments : Remarks: No relevant data found.

Other adverse effects

Components:

MCPA 2-ethylhexyl ester:

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

fluroxypyr-meptyl (ISO):

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

florasulam (ISO):

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

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Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

N,N-Dimethyloctanamide:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

N,N-Dimethyldecan-1-amide:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Hydrocarbons, C10, aromatics, <1% naphthalene:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14. TRANSPORT INFORMATION

International Regulations

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UNRTDG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(MCPA 2-ethylhexyl ester, Fluroxypyr 1-methylheptyl ester)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(MCPA 2-ethylhexyl ester, Fluroxypyr 1-methylheptyl ester)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964

IMDG-Code

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(MCPA 2-ethylhexyl ester, Fluroxypyr 1-methylheptyl ester)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes(MCPA 2-ethylhexyl ester, Fluroxypyr 1-methylheptyl ester)
Remarks : Stowage category A

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

TDG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(MCPA 2-ethylhexyl ester, Fluroxypyr 1-methylheptyl ester)
Class : 9
Packing group : III
Labels : 9
ERG Code : 171
Marine pollutant : yes(MCPA 2-ethylhexyl ester, Fluroxypyr 1-methylheptyl ester)

Further information

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

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For Canadian Ground transportation TDG Exemption: 1.45.1 Marine Pollutants (Part 3, Documentation, and Part 4, Dangerous Goods Safety Marks, do not apply if they are in transport solely on land by road vehicle or railway vehicle).

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:

DSL : This product contains components that are not listed on the Canadian DSL nor NDSL.

Pest Control Products Act (PCPA) Registration Number : 32099

Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control products label:

PCPA Label Hazard Communications:

Read the label and booklet before using. Keep out of reach of children.

WARNING POISON

CAUTION EYE AND SKIN IRRITANT

POTENTIAL SKIN SENSITIZER

HARMFUL IF SWALLOWED

Harmful or fatal if swallowed

This product is toxic to:

Non-target terrestrial plants

Aquatic organisms

SECTION 16. OTHER INFORMATION

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of other abbreviations

Dow IHG : Dow Industrial Hygiene Guideline
Dow IHG / TWA : Time Weighted Average (TWA):

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IATA - International Air

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Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - not otherwise specified; NOEC - Non-Observed Effective Concentration; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; (Q)SAR - (Quantitative) Structure Activity Relationship; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SDS - Safety Data Sheet; UN - United Nations.

DSL - Domestic substances List. WHMIS - Workplace Hazardous Materials Information System.

Revision Date : 11/16/2023
Date format : mm/dd/yyyy

Product code: GF-3193

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.

CA / 6N