SAFETY DATA SHEET
according to the Hazardous Products Regulations

ARES™ SN Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: 05/28/2024
2.0	12/11/2024	800080005824	Date of first issue: 05/28/2024

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 : ARES™ SN 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 2A

Reproductive toxicity : Category 2

GHS label elements
Hazard pictograms :

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
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.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P405 Store locked up.
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)
Ammonium Salt of Imazamox	Ammonium Salt of Imazamox	247057-22-3	3.1
Imazapyr-ammonium	Imazapyr-ammonium	81334-36-3	1.4
Propylene glycol	Propylene glycol	57-55-6	>= 3 - < 10 *
acetic acid	acetic acid	64-19-7	>= 0.1 - < 1 *
ammonia	ammonia	1336-21-6	> 0 - < 0.2 *
Balance	Balance	Not Assigned	> 80

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

SECTION 4. FIRST AID MEASURES

General advice : Wash clothing before reuse.
If inhaled : Move person to fresh air; if effects occur, consult a physician.
In case of skin contact : Wash skin thoroughly with soap and water.
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.
If swallowed : Immediately have person drink plenty of water or milk.
Most important symptoms and effects, both acute and delayed : None known.
Notes to physician : Treat symptomatically.
No specific antidote.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Alcohol-resistant foam

Unsuitable extinguishing media : None known.

Specific hazards during firefighting : 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 Nitrogen oxides (NOx) Sulphur oxides Ammonia Phosphorus compounds
Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.
Further information	:	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	:	Ensure adequate ventilation. 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 overpressurization 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 : Avoid formation of aerosol.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours/dust.
Do not smoke.
Handle in accordance with good industrial hygiene and safety practice.
Avoid exposure - obtain special instructions before use.
Smoking, eating and drinking should be prohibited in the application area.
Avoid inhalation of vapour or mist.
Do not swallow.
Do not get in eyes.
Avoid contact with skin and eyes.
Avoid prolonged or repeated contact with skin.
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 : 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
Propylene glycol	57-55-6	TWA (Vapour and aerosols)	50 ppm 155 mg/m3	CA ON OEL
		TWA (aerosol)	10 mg/m3	CA ON OEL

Personal protective equipment

Respiratory protection : Use NIOSH approved respiratory protection.

Hand protection

Remarks : Use gloves chemically resistant to this material.

Eye protection : Safety glasses with side-shields
Tightly fitting safety goggles
Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

Skin and body protection : Use chemical protective clothing resistant to this material, when there is any possibility of skin contact.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	Yellow to amber
Odour	:	aliphatic
Odour Threshold	:	No data available
pH	:	5 - 7 (20 °C)
Melting point/ range	:	Not applicable
Freezing point		No data available
Boiling point/boiling range	:	100 °C
Flash point	:	Method: closed cup not flammable
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	23.4 hPa (20 °C)
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	1.08 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	soluble
Auto-ignition temperature	:	398 °C
Viscosity		
Viscosity, dynamic	:	83 mPa,s (20 °C)
Explosive properties	:	No data available
Oxidizing properties	:	No data available

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 acids Strong bases 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 Nitrogen oxides (NOx) Sulphur oxides Ammonia Phosphorus compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

Ammonium Salt of Imazamox:

Acute oral toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Remarks: For similar material(s):
Acute inhalation toxicity	:	LC50 (Rat): > 6.3 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): > 4,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity Remarks: For similar material(s):

Imazapyr-ammonium:

Acute oral toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Remarks: For similar material(s):
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 5.1 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 Assessment: The substance or mixture has no acute dermal toxicity Remarks: For similar material(s):

Propylene glycol:

Acute oral toxicity	:	LD50 (Rat): > 20,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rabbit): 317.042 mg/l Exposure time: 2 h Test atmosphere: dust/mist Symptoms: No deaths occurred at this concentration. Assessment: The substance or mixture has no acute inhalation toxicity

Remarks: Mist may cause irritation of upper respiratory tract (nose and throat).

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

acetic acid:
Acute oral toxicity : LD50 (Rat): > 3,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 11.4 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 1,060 mg/kg

Skin corrosion/irritation
Components:
Ammonium Salt of Imazamox:
Species : Rabbit
Result : No skin irritation
Remarks : For similar material(s):

Imazapyr-ammonium:
Result : No skin irritation
Remarks : For similar material(s):

Propylene glycol:
Species : Rabbit
Result : No skin irritation

acetic acid:
Species : Rabbit
Result : Causes severe burns.

ammonia:
Result : Causes burns.

Serious eye damage/eye irritation
Product:
Result : Eye irritation

Components:
Ammonium Salt of Imazamox:
Species : Rabbit
Result : No eye irritation
Remarks : For similar material(s):

Imazapyr-ammonium:
Result : Eye irritation
Remarks : For similar material(s):

Propylene glycol:
Species : Rabbit
Result : No eye irritation

acetic acid:
Species : Rabbit
Result : Corrosive

ammonia:
Result : Corrosive

Respiratory or skin sensitisation
Components:
Ammonium Salt of Imazamox:
Result : Does not cause skin sensitisation.
Remarks : For similar material(s):

Imazapyr-ammonium:
Result : Does not cause skin sensitisation.
Remarks : For similar material(s):

Propylene glycol:
Species : Humans
Result : Does not cause skin sensitisation.

Germ cell mutagenicity
Components:
Ammonium Salt of Imazamox:
Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

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

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

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

Carcinogenicity
Components:
Ammonium Salt of Imazamox:
Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

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

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

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

Reproductive toxicity
Product:
Reproductive toxicity - Assessment : Suspected human reproductive toxicant

Components:

Ammonium Salt of Imazamox:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.
Did not cause birth defects in laboratory animals.

Propylene glycol:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction., In animal studies, did not interfere with fertility.
Did not cause birth defects or any other fetal effects in laboratory animals.

acetic acid:

Reproductive toxicity - Assessment : Did not cause birth defects in laboratory animals.

STOT - single exposure

Components:

Ammonium Salt of Imazamox:

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

Propylene glycol:

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

acetic acid:

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

ammonia:

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

Repeated dose toxicity

Components:

Ammonium Salt of Imazamox:

Remarks : For similar material(s):
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Propylene glycol:

Remarks : In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

acetic acid:

Remarks : In humans, effects have been reported on the following organs:
Respiratory tract.
Gastrointestinal tract.

ammonia:

Remarks : No relevant data found.

Aspiration toxicity

Components:

Ammonium Salt of Imazamox:

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

Propylene glycol:

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

acetic acid:
Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

ammonia:
Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

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

Components:

Ammonium Salt of Imazamox:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 122 mg/l Exposure time: 96 h Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 122 mg/l Exposure time: 48 h Remarks: For similar material(s):
Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus capricornutum (fresh water algae)): > 0.037 mg/l Exposure time: 120 h EC50 (Lemna gibba): 0.011 mg/l Exposure time: 14 d
Toxicity to fish (Chronic toxicity)	:	(Oncorhynchus mykiss (rainbow trout)): 11.82 mg/l Exposure time: 96 d Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	(Daphnia magna (Water flea)): 137 mg/l Exposure time: 21 d Remarks: For similar material(s):
Toxicity to terrestrial organisms	:	oral LD50 (Colinus virginianus (Bobwhite quail)): > 1846 mg/kg bodyweight. Remarks: Information given is based on data obtained from similar product. contact LD50 (Colinus virginianus (Bobwhite quail)): > 5572 mg/kg diet. Remarks: Information given is based on data obtained from similar product. oral LD50 (Apis mellifera (bees)): > 40 µg/bee Exposure time: 48 d Remarks: Information given is based on data obtained from similar product.

contact LD50 (Apis mellifera (bees)): > 58 µg/bee
Exposure time: 48 d
Remarks: Information given is based on data obtained from similar product.

Imazapyr-ammonium:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Remarks: For similar material(s):
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 71 mg/l Exposure time: 120 h Remarks: For similar material(s): EC50 (blue-green alga Anabaena flos-aquae): 11.7 mg/l Exposure time: 120 h Remarks: For similar material(s):
Toxicity to fish (Chronic toxicity)	:	(Oncorhynchus mykiss (rainbow trout)): 43.1 mg/l Exposure time: 28 d Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	(Daphnia magna (Water flea)): 97.1 mg/l Exposure time: 21 d Remarks: For similar material(s):
Toxicity to terrestrial organisms	:	oral LD50 (Colinus virginianus (Bobwhite quail)): > 2150 mg/kg bodyweight. Remarks: For similar active ingredient(s). dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5000 mg/kg diet. Remarks: For similar active ingredient(s). contact LD50 (Apis mellifera (bees)): > 100 µg/bee Remarks: For similar active ingredient(s).

Propylene glycol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Ceriodaphnia dubia (water flea)): 18,340 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 19,000 mg/l End point: Growth rate inhibition Exposure time: 96 h Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Ceriodaphnia dubia (water flea)): 13,020 mg/l End point: number of offspring Exposure time: 7 d Test Type: semi-static test
Toxicity to microorganisms	:	NOEC (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h

acetic acid:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 75 mg/l Exposure time: 96 h Test Type: Static
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 47 - 52.9 mg/l Exposure time: 24 h Test Type: static test Method: Method Not Specified.
Toxicity to algae/aquatic plants	:	ErC50 (blue-green alga Anabaena flos-aquae): 55.22 mg/l End point: Growth rate Exposure time: 72 h Test Type: Static Method: OECD Test Guideline 201 EbC50 (blue-green alga Anabaena flos-aquae): 29.23 mg/l End point: Biomass Exposure time: 72 h Test Type: Static Method: OECD Test Guideline 201 EC50 (Algae): 156 mg/l Exposure time: 24 h
Toxicity to microorganisms	:	NOEC (Pseudomonas putida): 1,150 mg/l Exposure time: 16 h Test Type: Static

ammonia:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.87 mg/l Exposure time: 96 h LC50 (Pimephales promelas (fathead minnow)): 1.2 mg/l Exposure time: 96 h
M-Factor (Acute aquatic toxicity)	:	1

Persistence and degradability

Components:

Ammonium Salt of Imazamox:

Biodegradability	:	Result: Not biodegradable Remarks: For similar material(s): Expected to degrade slowly in the environment.

Imazapyr-ammonium:

Biodegradability	:	Result: Not biodegradable Remarks: For similar material(s): Expected to degrade slowly in the environment.

Propylene glycol:

Biodegradability : aerobic
Result: Readily biodegradable.
Biodegradation: 81 %
Exposure time: 28 d
Method: OECD Test Guideline 301F or Equivalent
Remarks: 10-day Window: Pass

Result: Readily biodegradable.
Biodegradation: 96 %
Exposure time: 64 d
Method: OECD Test Guideline 306 or Equivalent
Remarks: 10-day Window: Not applicable

Biochemical Oxygen Demand (BOD) : 69.000 %
Incubation time: 5 d

70.000 %
Incubation time: 10 d

86.000 %
Incubation time: 20 d

Chemical Oxygen Demand (COD) : 1.53 kg/kg

ThOD : 1.68 kg/kg

Photodegradation : Rate constant: 1.28E-11 cm3/s
Method: Estimated.

acetic acid:

Biodegradability :
Result: Readily biodegradable.
Biodegradation: 95 %
Exposure time: 5 d
Method: OECD Test Guideline 302B

Biochemical Oxygen Demand (BOD) : 64.100 %
Incubation time: 5 d

67.900 %
Incubation time: 10 d

86.700 %
Incubation time: 20 d

ThOD : 1.06 kg/kg

Photodegradation : Test Type: Half-life (indirect photolysis)
Sensitiser: OH radicals
Rate constant: 6.22E-13 cm3/s
Method: Estimated.

ammonia:

Biodegradability : Remarks: Biodegradation may occur under aerobic conditions (in the presence of oxygen).
Biodegradation rate may increase in soil and/or water with acclimation.

ThOD : 0.76 kg/kg

Bioaccumulative potential
Components:
Propylene glycol:
Bioaccumulation : Bioconcentration factor (BCF): 0.09
Method: Estimated.

Partition coefficient: n-octanol/water : log Pow: -1.07
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

acetic acid:
Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 3
Method: Estimated.

Partition coefficient: n-octanol/water : log Pow: -0.17
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

ammonia:
Partition coefficient: n-octanol/water : Remarks: No bioconcentration is expected because of the relatively high water solubility.

Balance:
Partition coefficient: n-octanol/water : Remarks: No relevant data found.

Mobility in soil
Components:
Ammonium Salt of Imazamox:
Distribution among environmental compartments : Koc: 5 - 144
Remarks: For similar material(s):
Potential for mobility in soil is very high (Koc between 0 and 50).

Imazapyr-ammonium:
Distribution among environmental compartments : Koc: 8.81
Remarks: For similar material(s):
Potential for mobility in soil is very high (Koc between 0 and 50).

Propylene glycol:
Distribution among environmental compartments : Koc: < 1
Method: Estimated.
Remarks: Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Potential for mobility in soil is very high (Koc between 0 and 50).

acetic acid:
Distribution among environmental compartments : Koc: < 1
Method: Estimated.
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

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

Balance:

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

Other adverse effects

Components:

Ammonium Salt of Imazamox:

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.

Imazapyr-ammonium:

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.

Propylene glycol:

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.

acetic acid:

Results of PBT and vPvB assessment : This substance is readily biodegradable and thus is not considered persistent or very persistent (P or vP). This substance has a low potential to bioaccumulate due to low affinity for octanol and high water solubility so is not considered bioaccumulative or very bioaccumulative (B or vB).

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

ammonia:

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.

Balance:

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.

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

UNRTDG

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Imazamox Ammonium)
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. (Imazamox Ammonium)
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. (Imazamox Ammonium)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes(Imazamox Ammonium)
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. (Imazamox Ammonium)
Class	:	9
Packing group	:	III
Labels	:	9
ERG Code	:	171
Marine pollutant	:	yes(Imazamox Ammonium)

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.

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 : 33167

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.

This product is toxic to:
Non-target terrestrial plants

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

CA ON OEL : Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA ON OEL / TWA : Time-Weighted Average Limit (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 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	:	12/11/2024
Date format	:	mm/dd/yyyy

Product code: W8F-7-1

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.

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