

# SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



## Embed™

Version	Revision Date:	SDS Number:	Date of last issue: 06/09/2022
1.1	09/15/2023	800080005519	Date of first issue: 06/09/2022

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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 the United States and may not meet the regulatory requirements in other countries.

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### SECTION 1. IDENTIFICATION

Product name : Embed™

#### Manufacturer or supplier's details

##### COMPANY IDENTIFICATION

**Manufacturer/importer** : CORTEVA AGRISCIENCE LLC  
9330 ZIONSVILLE RD  
INDIANAPOLIS, IN, 46268-1053  
UNITED STATES

**Customer Information Number** : 1-800-258-3033  
**E-mail address** : customerinformation@corteva.com

**Emergency telephone** : INFOTRAC (CONTRACT 84224).  
+1 800-992-5994 or +1 317-337-6009

#### Recommended use of the chemical and restrictions on use

Recommended use : End use herbicide product

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### SECTION 2. HAZARDS IDENTIFICATION

#### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity (Oral) : Category 4

Serious eye damage : Category 1

#### GHS label elements

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Hazard pictograms :

Signal Word : Danger

Hazard Statements : H302 Harmful if swallowed.  
H318 Causes serious eye damage.

Precautionary Statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear eye protection/ face protection.  
**Response:**  
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.  
**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	CAS-No.	Concentration (% w/w)
2,4-D choline salt	1048373-72-3	56.3
Propylene glycol	57-55-6	>= 3 - < 10
Balance	Not Assigned	> 30

Actual concentration 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.

In case of skin contact : Take off contaminated clothing. Rinse skin immediately with

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- plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.  
Suitable emergency safety shower facility should be available in work area.
- In case of eye contact : Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.  
Suitable emergency eye wash facility should be immediately available.
- 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 : Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist.  
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.
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### SECTION 5. FIRE-FIGHTING 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.

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- Combustion products may include and are not limited to:  
Carbon oxides
- 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 fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.  
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 absorbent.  
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).
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See Section 13, Disposal Considerations, for additional information.

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : To avoid spills during handling keep bottle on a metal tray.  
Do not breathe vapors/dust.  
Do not smoke.  
Handle in accordance with good industrial hygiene and safety practice.  
Smoking, eating and drinking should be prohibited in the application area.  
Do not get in eyes.  
Avoid contact with skin and eyes.  
Avoid prolonged or repeated contact with skin.  
Keep container tightly closed.  
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 labeled 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

#### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2,4-D choline salt	1048373-72-3	TWA	10 mg/m3	Dow IHG
Propylene glycol	57-55-6	TWA	10 mg/m3	US WEEL

- 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.

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### 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

Remarks : Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). 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 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.

Color : Brown

Odor : Amine

Odor Threshold : No data available

pH : 4.71 (76.1 °F / 24.5 °C)  
Method: pH Electrode

Melting point/range : Not applicable

Freezing point : No data available

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Boiling point/boiling range : No data available

Flash point : > 212 °F / > 100 °C  
Method: Pensky-Martens Closed Cup ASTM D 93

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

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Density : 1.1883 g/cm<sup>3</sup> (68 °F / 20 °C)  
Method: Digital density meter

Solubility(ies)  
Water solubility : No data available

Autoignition temperature : No data available

Viscosity  
Viscosity, dynamic : 27.5 mPa.s (68 °F / 20 °C)  
11.5 mPa.s (104 °F / 40 °C)

Explosive properties : No

Oxidizing properties : No significant increase (>5C) in temperature.

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### 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.

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Conditions to avoid : None known.

Incompatible materials : None.

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

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity : LD50 (Rat, female): > 1,200 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.21 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

##### Components:

##### **2,4-D choline salt:**

Acute oral toxicity : LD50 (Rat): 639 mg/kg  
Remarks: For similar active ingredient(s).

Acute inhalation toxicity : Remarks: At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause irritation and other effects.  
Prolonged excessive exposure to dust may cause adverse effects.  
Dust may cause irritation to upper respiratory tract (nose and throat).

LC50 (Rat): > 1.79 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: For similar active ingredient(s).  
Maximum attainable concentration.

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg



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Remarks: For similar active ingredient(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

### Skin corrosion/irritation

#### Product:

Species : Rabbit  
Result : No skin irritation

#### Components:

##### 2,4-D choline salt:

Result : No skin irritation

##### Propylene glycol:

Species : Rabbit  
Result : No skin irritation

### Serious eye damage/eye irritation

#### Product:

Species : Rabbit  
Result : Corrosive

#### Components:

##### 2,4-D choline salt:

Result : Corrosive

##### Propylene glycol:

Species : Rabbit  
Result : No eye irritation

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### Respiratory or skin sensitization

#### Product:

Species : Mouse  
Result : Does not cause skin sensitization.

#### Components:

##### **2,4-D choline salt:**

Assessment : Does not cause skin sensitization.  
Remarks : Did not cause allergic skin reactions when tested in guinea pigs.  
Did not demonstrate the potential for contact allergy in mice.

Remarks : For respiratory sensitization:  
No relevant data found.

##### **Propylene glycol:**

Species : human  
Assessment : Does not cause skin sensitization.

### Germ cell mutagenicity

#### Components:

##### **2,4-D choline salt:**

Germ cell mutagenicity - Assessment : For similar active ingredient(s)., 2,4-Dichlorophenoxyacetic acid., In vitro genetic toxicity studies were predominantly negative.

##### **Propylene glycol:**

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

### Carcinogenicity

#### Components:

##### **2,4-D choline salt:**

Carcinogenicity - Assessment : For similar active ingredient(s)., There is no evidence of carcinogenicity in laboratory animal toxicity studies. While some epidemiological studies report a positive association between 2,4-D exposure and cancer, a weight of evidence analysis of the epidemiology data across studies reveals no indication that 2,4-D causes cancer in humans.

##### **Propylene glycol:**

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

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**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

#### Components:

##### **2,4-D choline salt:**

Reproductive toxicity - Assessment : For similar active ingredient(s), 2,4-Dichlorophenoxyacetic acid., In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring.  
For similar active ingredient(s), 2,4-Dichlorophenoxyacetic acid., Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

##### **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.

### STOT-single exposure

#### Product:

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

#### Components:

##### **2,4-D choline salt:**

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.

### Repeated dose toxicity

#### Components:

##### **2,4-D choline salt:**

Remarks : For similar active ingredient(s).  
2,4-Dichlorophenoxyacetic acid.

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In animals, effects have been reported on the following organs:  
Liver.  
Kidney.  
Muscles.  
Observations in animals include:  
Gastrointestinal irritation.  
Vomiting.

### Propylene glycol:

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

### Aspiration toxicity

#### Product:

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

#### Components:

##### **2,4-D choline salt:**

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

##### **Propylene glycol:**

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

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **2,4-D choline salt:**

Toxicity to fish : Remarks: For similar active ingredient(s).  
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 (Poecilia reticulata (guppy)): 8.4 - 70.7 mg/l  
Exposure time: 96 h  
Test Type: static test  
Remarks: For similar active ingredient(s).

Toxicity to daphnia and other aquatic invertebrates : LC50 (stonefly Pteronarcys californica): 1.6 - 15 mg/l  
Exposure time: 96 h  
Test Type: static test

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 24.2 mg/l  
Exposure time: 96 h

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Test Type: static test  
Remarks: For similar material(s):

EC50 (Lemna gibba): 0.58 mg/l  
Exposure time: 14 d  
Remarks: For similar material(s):

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 63.4 mg/l  
End point: growth  
Exposure time: 32 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 79 mg/l  
End point: number of offspring  
Exposure time: 21 d  
Remarks: Information refers to the main ingredient.

Toxicity to terrestrial organisms : Remarks: For similar active ingredient(s)., 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).

dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5620 mg/kg diet.  
Remarks: For similar active ingredient(s).

oral LD50 (Anas platyrhynchos (Mallard duck)): > 500 mg/kg bodyweight.  
Remarks: For similar active ingredient(s).

oral LD50 (Apis mellifera (bees)): 94 micrograms/bee  
Remarks: For similar active ingredient(s).

### Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

### 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

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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

### Persistence and degradability

#### Components:

##### **2,4-D choline salt:**

Biodegradability : Remarks: For similar active ingredient(s).  
Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%).

##### **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

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 cm<sup>3</sup>/s  
Method: Estimated.

### Bioaccumulative potential

#### Components:

##### **2,4-D choline salt:**

Partition coefficient: n- : Remarks: For similar active ingredient(s).

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octanol/water Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

### 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).

### Balance:

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

### Mobility in soil

#### Components:

##### 2,4-D choline salt:

Distribution among environmental compartments : Koc: 20 - 136  
Method: Measured  
Remarks: For similar active ingredient(s).  
Potential for mobility in soil is high (Koc between 50 and 150).

##### 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).

### Balance:

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

### Other adverse effects

#### Components:

##### 2,4-D choline salt:

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.

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### 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.

### 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. (2,4-D Salt)  
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. (2,4-D Salt)  
Class : 9



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Version	Revision Date:	SDS Number:	Date of last issue: 06/09/2022
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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. (2,4-D Salt)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : yes(2,4-D Salt)  
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.

### Domestic regulation

#### 49 CFR Road

UN/ID/NA number : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (2,4-D Salt)  
Class : 9  
Packing group : III  
Labels : CLASS 9  
ERG Code : 171  
Marine pollutant : no  
Reportable Quantity : 2,4-D Salt only regulated in pack sizes > 91 kg

### 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 5L 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.

### 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

**SARA 311/312 Hazards** : Acute toxicity (any route of exposure)  
Serious eye damage or eye irritation

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**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

#### Pennsylvania Right To Know

Propylene glycol 57-55-6

#### The ingredients of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

#### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

#### Federal Insecticide, Fungicide and Rodenticide Act

EPA Registration Number : 62719-634

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER

Corrosive

Causes irreversible eye damage

Harmful if swallowed, inhaled or absorbed through the skin.

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## 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
US WEEL	: USA. Workplace Environmental Exposure Levels (WEEL)
Dow IHG / TWA	: Time Weighted Average (TWA):
US WEEL / TWA	: 8-hr 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. CFR - Code of Federal Regulations. IARC - International Agency for Research on Cancer. IATA-DGR - International Air Transport Association Dangerous Goods Regulations. OSHA - Occupational Safety and Health Administration. RCRA - Resource Conservation and Recovery Act. RQ - Reportable Quantity. SARA - Superfund Amendments and Reauthorization Act. TSCA - Toxic Substances Control Act.

Revision Date : 09/15/2023

Product code: GF-2654

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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