



Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 80008000003 Date of first issue: 04/13/2022

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.

SECTION 1. IDENTIFICATION

Product name : Closer® SC

Manufacturer or supplier's details

COMPANY IDENTIFICATION

Manufacturer/importer : CORTEVA AGRISCIENCE LLC

9330 ZIONSVILLE RD

INDIANAPOLIS, IN, 46268-1053

UNITED STATES

Customer Information

Number

: 800-992-5994

E-mail address : customerinformation@corteva.com

Emergency telephone : INFOTRAC (CONTRACT 84224).

800-992-5994 or 317-337-6009

Recommended use of the chemical and restrictions on use

Recommended use : End use insecticide product

SECTION 2. HAZARDS IDENTIFICATION

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

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
sulfoxaflor (ISO)	946578-00-3	21.8





Version **Revision Date:** SDS Number: Date of last issue: -

04/13/2022 800080000003 Date of first issue: 04/13/2022 1.0

Propylene glycol	57-55-6	>= 3 - < 10
Unknown(s) - Sulfonated aromatic polymer, sodium salt for 300000000578, 300000000299	Not Assigned	>= 1 - < 3
Balance	Not Assigned	> 60

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

plenty of water for 15-20 minutes. Call a poison control center

or doctor for treatment advice.

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.

No emergency medical treatment necessary. If swallowed

Most important symptoms and effects, both acute and

delayed

None known.

Protection of first-aiders If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

No specific antidote. Notes to physician

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. 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 prod: :

ucts

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)





Version **Revision Date:** SDS Number: Date of last issue: -

04/13/2022 80008000003 Date of first issue: 04/13/2022 1.0

Specific extinguishing meth-

ods

Remove undamaged containers from fire area if it is safe to do

Evacuate area.

Use extinguishing measures that are appropriate to local cir-

cumstances 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 nec-

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec: : tive equipment and emergency procedures

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 absorb-

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 infor-

mation.





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapors/dust.

Handle in accordance with good industrial hygiene and safety

practice.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

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	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
sulfoxaflor (ISO)	946578-00-3	TWA (Inhal-	0.1 mg/m3	ACGIH
		able particu-		
		late matter)		
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.

Personal protective equipment

Respiratory protection : Respiratory protection should be worn when there is a poten-

tial 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 ap-

proved air-purifying respirator.

Hand protection

Remarks : Chemical protective gloves should not be needed when han-

dling this material. Consistent with general hygienic practice

for any material, skin contact should be minimized.

Eye protection : Use safety glasses (with side shields).



Closer® SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 80008000003 Date of first issue: 04/13/2022

Skin and body protection : No precautions other than clean body-covering clothing

should be needed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid.

Color : Tan

Odor : Mild

Odor Threshold : No data available

pH : 4.67 (75.0 °F / 23.9 °C)

Concentration: 1 % Method: pH Electrode

Melting point/range : Not applicable

Freezing point No data available

Boiling point/boiling range : No data available

Flash point : $> 212 \, ^{\circ}\text{F} \, / > 100 \, ^{\circ}\text{C}$

Method: closed cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable to liquids

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

Density : 1.1066 g/cm3 (68 °F / 20 °C)

Method: Digital density meter

Solubility(ies)

Water solubility : No data available

Autoignition temperature : 662 °F / 350 °C

Method: EC Method A15

Viscosity

Viscosity, dynamic : No data available

Explosive properties : No





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

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 reac-

tions

Stable under recommended storage conditions.

No hazards to be specially mentioned.

None known.

Conditions to avoid : None known. Incompatible materials : Strong acids

Strong bases

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)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

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

GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.21 mg/l

Exposure time: 4 h

Test atmosphere: Aerosol

Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Maximum attainable concentration.

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

GLP: yes

Components:

sulfoxaflor (ISO):

Acute oral toxicity : LD50 (Rat, female): 1,000 mg/kg

Remarks: Observations in animals include:

Muscle spasms or twitches.

Tremors. Convulsions.

Acute inhalation toxicity : LC50 (Rat): > 2.09 mg/l

Test atmosphere: dust/mist





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

Symptoms: The LC50 value is greater than the Maximum Attainable Concentration., No deaths occurred at this concen-

tration.

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Symptoms: No deaths occurred at this concentration.

Assessment: The substance or mixture has no acute dermal

toxicity

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 inhala-

tion 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

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 300000000299:

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

Skin corrosion/irritation

Product:

Species : Rabbit

Result : No skin irritation

GLP : yes

Components:

sulfoxaflor (ISO):

Species : Rabbit

Result : No skin irritation

Propylene glycol:

Species : Rabbit

Result : No skin irritation

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 300000000578, 300000000299:

Result : No skin irritation



Closer® SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

Serious eye damage/eye irritation

Product:

Species : Rabbit

Result : No eye irritation

GLP : yes

Components:

sulfoxaflor (ISO):

Species : Rabbit

Result : No eye irritation

Propylene glycol:

Species : Rabbit

Result : No eye irritation

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 300000000299:

Result : Eye irritation

Respiratory or skin sensitization

Product:

Assessment : Does not cause skin sensitization.

Components:

sulfoxaflor (ISO):

Species : Mouse

Assessment : Does not cause skin sensitization.

Propylene glycol:

Species : human

Assessment : Does not cause skin sensitization.

Germ cell mutagenicity

Components:

sulfoxaflor (ISO):

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

Assessment toxicity studies were negative.

Propylene glycol:

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

Assessment toxicity studies were negative.





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

Carcinogenicity

Components:

sulfoxaflor (ISO):

Carcinogenicity - Assess-

ment

Has caused cancer in laboratory animals., However, the effects are species specific and are not relevant to humans.

Propylene glycol:

Carcinogenicity - Assess-

Did not cause cancer in laboratory animals.

ment

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.

OSHANo 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:

sulfoxaflor (ISO):

Reproductive toxicity - As-

sessment

In animal studies, has been shown to interfere with reproduction., However, the effects are species specific and are not relevant to humans., These concentrations exceed relevant

human dose levels.

Has caused birth defects in lab animals at high doses., In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring., However, the effects are species specific and are not relevant

to humans.

Propylene glycol:

Reproductive toxicity - As-

sessment

: In animal studies, did not interfere with reproduction., In ani-

mal studies, did not interfere with fertility.

Did not cause birth defects or any other fetal effects in labora-

tory animals.

STOT-single exposure

Product:

Assessment : Evaluation of available data suggests that this material is not

an STOT-SE toxicant.

Components:

sulfoxaflor (ISO):

Assessment : Evaluation of available data suggests that this material is not

an STOT-SE toxicant.



Closer® SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

Propylene glycol:

Assessment : Evaluation of available data suggests that this material is not

an STOT-SE toxicant.

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 300000000299:

Assessment : Evaluation of available data suggests that this material is not

an STOT-SE toxicant.

STOT-repeated exposure

Product:

Assessment : Evaluation of available data suggests that this material is not

an STOT-RE toxicant.

Repeated dose toxicity

Components:

sulfoxaflor (ISO):

Remarks : In animals, effects have been reported on the following or-

gans: Liver.

Propylene glycol:

Remarks : In rare cases, repeated excessive exposure to propylene gly-

col may cause central nervous system effects.

Aspiration toxicity

Product:

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

Components:

sulfoxaflor (ISO):

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

Propylene glycol:

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

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 300000000578, 300000000299:

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





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 939 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): > 880 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202 or Equivalent

LC50 (saltwater mysid Mysidopsis bahia): > 1 - < 10 mg/l

Exposure time: 96 h

Remarks: For similar material(s):

Toxicity to algae/aquatic

plants

ErC50 (diatom Navicula sp.): > 100 mg/l

End point: Growth rate inhibition

Exposure time: 72 h

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): 6.4 mg/kg dry weight

(d.w.)

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

Remarks: Material is practically non-toxic to birds on an acute

basis (LD50 > 2000 mg/kg).

oral LD50 (Colinus virginianus (Bobwhite quail)): > 2250

mg/kg bodyweight.

oral LD50 (Apis mellifera (bees)): 0.23 micrograms/bee

Exposure time: 48 h

contact LD50 (Apis mellifera (bees)): 0.59 micrograms/bee

Exposure time: 48 h

Ecotoxicology Assessment

Acute aguatic toxicity : Toxic to aguatic life.

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

Components:

sulfoxaflor (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 387 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203 or Equivalent





Version **Revision Date:** SDS Number: Date of last issue: -

04/13/2022 80008000003 Date of first issue: 04/13/2022 1.0

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 363 mg/l

Exposure time: 96 h

EC50 (Cyprinus carpio (Carp)): > 402 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 399 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202 or Equivalent

LC50 (Chironomus sp.): 0.622 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 201 or Equivalent

ErC50 (Lemna gibba): > 100 mg/l

Exposure time: 7 d

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): > 12.9 mg/l

End point: mortality Exposure time: 30 d

Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 50.5 mg/l

End point: growth Exposure time: 21 d Test Type: semi-static test

NOEC (saltwater mysid Mysidopsis bahia): 0.114 mg/l

End point: number of offspring

Exposure time: 28 d

Test Type: flow-through test

Method: OECD Test Guideline 211 or Equivalent

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): 0.885 mg/kg

Toxicity to terrestrial organ-

isms

dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5620

mg/kg bodyweight.

oral LD50 (Colinus virginianus (Bobwhite quail)): 676 mg/kg

oral LD50 (Apis mellifera (bees)): 0.146 micrograms/bee

Exposure time: 48 h

contact LD50 (Apis mellifera (bees)): 0.539 micrograms/bee

Exposure time: 48 d

Ecotoxicology Assessment

Acute aquatic toxicity Very toxic to aquatic life.





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

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

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 (Chron-

ic 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

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 30000000299:

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).

Remarks: Material is harmful to aquatic organisms

(LC50/EC50/IC50 between 10 and 100 mg/L in the most sen-

sitive species).

LC50 (Danio rerio (zebra fish)): > 10 - 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

(Pseudokirchneriella subcapitata (green algae)): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EC10 (Daphnia magna (Water flea)): > 10 - 100 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

Persistence and degradability

Components:

sulfoxaflor (ISO):

Biodegradability : Result: Not biodegradable

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 310

Remarks: Material is not readily biodegradable according to

OECD/EEC guidelines.

ThOD : 1.90 kg/kg

Photodegradation : Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals

Rate constant: 1.653E-11 cm3/s

Method: Estimated.

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 De-

mand (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.

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 300000000299:

Biodegradability : Result: Not biodegradable

Remarks: No appreciable biodegradation is expected.



Closer® SC

Version **Revision Date:** SDS Number: Date of last issue: -

04/13/2022 80008000003 Date of first issue: 04/13/2022 1.0

Bioaccumulative potential

Components:

sulfoxaflor (ISO):

Partition coefficient: nlog Pow: 0.802 (68 °F / 20 °C)

pH: 7 octanol/water

Method: Measured

Remarks: Bioconcentration potential is low (BCF < 100 or Log

Pow < 3).

Propylene glycol:

Bioaccumulation Bioconcentration factor (BCF): 0.09

Method: Estimated.

Partition coefficient: n-

log Pow: -1.07 Method: Measured octanol/water

Remarks: Bioconcentration potential is low (BCF < 100 or Log

Pow < 3).

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 300000000299:

Partition coefficient: n-

octanol/water

Remarks: No relevant data found.

Balance:

Partition coefficient: n-

octanol/water

Remarks: No relevant data found.

Mobility in soil

Components:

sulfoxaflor (ISO):

Distribution among environ-

mental compartments

Koc: 40

Method: Measured

Remarks: Potential for mobility in soil is very high (Koc be-

tween 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).

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 300000000578, 300000000299:

Distribution among environ-

mental compartments

Remarks: No relevant data found.

Balance:

Distribution among environ-: Remarks: No relevant data found.





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

mental compartments

Other adverse effects

Product:

Additional ecological infor-

mation

: Toxic to aquatic life with long lasting effects.

Components:

sulfoxaflor (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.

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.

Unknown(s) - Sulfonated aromatic polymer, sodium salt for 30000000578, 300000000299:

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, bioac-

cumulation 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





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

material generated to determine the proper waste identification and disposal methods in compliance with applicable regu-

lations.

If the material as supplied becomes a waste, follow all appli-

cable 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.

(Sulfoxaflor)

Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3082

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.

(Sulfoxaflor)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo : 964

aircraft)

Packing instruction (passen: 964

ger aircraft)

IMDG-Code

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Sulfoxaflor)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

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

Not regulated as a dangerous good

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





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

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 : No SARA Hazards

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

California Prop. 65

WARNING: This product can expose you to chemicals including sulphuric acid, formaldehyde, naphthalene, ethylene oxide, which is/are known to the State of California to cause cancer, and ethylene oxide, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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 : 62719-623

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:

CAUTION

Causes moderate eye irritation





Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

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

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)

ACGIH / TWA : 8-hour, time-weighted average

US WEEL / TWA : 8-hr TWA

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; 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; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 04/13/2022

Product code: GF-2032



Closer® SC

Version Revision Date: SDS Number: Date of last issue: -

1.0 04/13/2022 800080000003 Date of first issue: 04/13/2022

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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