

**TUQUE EXOGEM** 

Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

#### **SECTION 1. IDENTIFICATION**

Product name : TUQUE EXOGEM

Design code. : A23543A

Product Registration number : 100-1733

Manufacturer or supplier's details

Company name of supplier : Syngenta Crop Protection, LLC

Address : Post Office Box 18300

Greensboro NC 27419

United States of America (USA)

Telephone : 1 800 334 9481

Telefax : 1 336 632 2192

E-mail address : sds.requests@syngenta.com

Emergency telephone : 1 800 888 8372

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

Restrictions on use : General Use Pesticide

#### **SECTION 2. HAZARDS IDENTIFICATION**

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

Eye irritation : Category 2B

Germ cell mutagenicity : Category 2

Carcinogenicity : Category 1B

Specific target organ toxicity : Category 3 (Respiratory system)

- single exposure

**GHS** label elements

Hazard pictograms :







Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

Signal Word : Danger

Hazard Statements : H320 Causes eye irritation.

H335 May cause respiratory irritation. H341 Suspected of causing genetic defects.

H350 May cause cancer.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P261 Avoid breathing mist or vapors. P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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/ atten-

tion.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

None known.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

# Components

Chemical name	CAS-No.	Concentration (% w/w)
Reaction mass of N,N- dimethyldecan-1-amide and N,N- dimethyloctanamide	Not Assigned	>= 20 - < 30
kaolin	1332-58-7	>= 5 - < 10
propane-1,2,3-triol	56-81-5	>= 5 - < 10
fludioxonil	131341-86-1	7.1171
Oxirane, 2,2'-[1,3-	101-90-6	>= 5 - < 10



TUQUE EXOGEM

Version Revision Date: SDS Number: This version replaces all previous versions.

1.0 04/20/2023 S00064780268

phenylenebis(oxymethylene)]bis		
poly[oxy(methyl-1,2-ethanediyl)],	9046-10-0	>= 1 - < 5
alpha-(2-aminomethylethyl)-omega-		
(2-aminomethylethoxy)-#		
benzovindiflupyr	1072957-71-1	0.7117

Actual concentration is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice : Have the product container, label or Safety Data Sheet with

you when calling the emergency number, a poison control

center or physician, or going for treatment.

If inhaled : Take the victim into fresh air.

If breathing is irregular or stopped, administer artificial

respiration.

Keep patient warm and at rest.

Call a physician or poison control center immediately.

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

Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Remove contact lenses.

Immediate medical attention is required.

If swallowed : If swallowed, seek medical advice immediately and show this

container or label.

Do NOT induce vomiting.

Most important symptoms and effects, both acute and

delayed

Nonspecific

No symptoms known or expected.

Notes to physician : There is no specific antidote available.

Treat symptomatically.

### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam

or

Water spray

Unsuitable extinguishing

media

: Do not use a solid water stream as it may scatter and spread

fire.

Specific hazards during fire

fighting

As the product contains combustible organic ingredients, fire

will produce dense black smoke containing hazardous



Version Revision Date: SDS Number: This version replaces all previous versions. 04/20/2023 S00064780268 1.0

products of combustion (see section 10).

Exposure to decomposition products may be a hazard to

health.

Further information Do not allow run-off from fire fighting to enter drains or water

courses.

Cool closed containers exposed to fire with water spray.

Special protective equipment

for fire-fighters

Wear full protective clothing and self-contained breathing

apparatus.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :

tive equipment and emer-

gency procedures

Refer to protective measures listed in sections 7 and 8.

Environmental precautions Prevent further leakage or spillage if safe to do so.

> Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for

containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13). Clean contaminated surface thoroughly.

Clean with detergents. Avoid solvents.

Retain and dispose of contaminated wash water.

# **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling No special protective measures against fire required.

> Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

Conditions for safe storage No special storage conditions required.

Keep containers tightly closed in a dry, cool and well-

ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

#### 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	
kaolin	1332-58-7	TWA (Res-	2 mg/m3	ACGIH
		pirable par-		
		ticulate mat-		



Version Revision Date: SDS Number: This version replaces all previous versions. 3.0 04/20/2023 S00064780268

		ter)		
		TWA (Res-	5 mg/m3	NIOSH REL
		pirable)		
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total	15 mg/m3	OSHA Z-1
		dust)		
		TWA (respir-	5 mg/m3	OSHA Z-1
		able fraction)		
		TWA (Total	10 mg/m3	OSHA P0
		dust)		
		TWA (respir-	5 mg/m3	OSHA P0
		able dust		
		fraction)		
propane-1,2,3-triol	56-81-5	TWA (mist,	5 mg/m3	OSHA Z-1
		respirable		
		fraction)		
		TWA (mist,	15 mg/m3	OSHA Z-1
		total dust)		
		TWA (Mist -	10 mg/m3	OSHA P0
		total dust)		
		TWA (Mist -	5 mg/m3	OSHA P0
		respirable		
		fraction)		
fludioxonil	131341-86-1	TWA	5 mg/m3	Syngenta
		TWA (Inhal-	1 mg/m3	ACGIH
		able particu-		
		late matter)		
benzovindiflupyr	1072957-71-	TWA	1 mg/m3	Syngenta
	1			

### **Engineering measures**

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.

Seek additional occupational hygiene advice.

## Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection



Version 1.0 Revision Date: 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

Remarks

Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Tightly fitting safety goggles

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

Remove and wash contaminated clothing before re-use.

Wear as appropriate: Impervious clothing

Protective measures : The use of technical measures should always have priority

over the use of personal protective equipment.

When selecting personal protective equipment, seek

appropriate professional advice.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : beige brown

Odor : No data available

Odor Threshold : No data available

pH : 7.6

Concentration: 1 %w/v

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Method: Seta closed cup, Equilibrium method

does not flash



**TUQUE EXOGEM** 

Version 1.0 Revision Date: 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

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

Relative vapor density : No data available

Density : 1.11 g/cm3

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : 824 °F / 440 °C

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle size : No data available

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

No dangerous reaction known under conditions of normal use.

Conditions to avoid : No decomposition if used as directed.

Incompatible materials : None known.

Hazardous decomposition

products

: No hazardous decomposition products are known.



Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

## **SECTION 11. TOXICOLOGICAL INFORMATION**

## Information on likely routes of exposure

Ingestion Inhalation Skin contact Eye contact

## Acute toxicity

**Product:** 

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

Assessment: The component/mixture is minimally toxic after

single ingestion.

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.05 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50: > 2,000 mg/kg

Assessment: The component/mixture is minimally toxic after

single contact with skin. Remarks: Expert judgment

#### **Components:**

fludioxonil:

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

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

Assessment: The substance or mixture has no acute dermal

toxicity

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Acute oral toxicity : LD50 Oral (Rabbit): 1,240 mg/kg

Acute dermal toxicity : Assessment: The component/mixture is toxic after single con-

tact with skin.

poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)-#:

Acute oral toxicity : LD50 (Rat, male and female): 1,555 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 1,100 mg/kg



**TUQUE EXOGEM** 

Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

benzovindiflupyr:

Acute oral toxicity : LD50 (Rat, female): 55 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 0.56 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

**Product:** 

Species : Rabbit

Result : No skin irritation

**Components:** 

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Result : Irritating to skin.

fludioxonil:

Species : Rabbit

Result : No skin irritation

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Result : Irritating to skin.

poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-

aminomethylethoxy)-#:

Result : Corrosive after 3 minutes to 1 hour of exposure

benzovindiflupyr:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

**Product:** 

Species : Rabbit

Result : Irritation to eyes, reversing within 7 days

**Components:** 

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Result : Risk of serious damage to eyes.



Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

fludioxonil:

Species : Rabbit

Result : No eye irritation

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Result : Eye irritation

benzovindiflupyr:

Species : Rabbit

Result : No eye irritation

Respiratory or skin sensitization

**Product:** 

Test Type : Local lymph node assay (LLNA)

Species : Mouse

Result : Did not cause sensitization on laboratory animals.

**Components:** 

fludioxonil:

Species : Guinea pig

Result : Did not cause sensitization on laboratory animals.

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Result : May cause sensitization by skin contact.

benzovindiflupyr:

Test Type : mouse lymphoma cells

Species : Mouse

Result : Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

**Components:** 

fludioxonil:

Germ cell mutagenicity - : A

Animal testing did not show any mutagenic effects.

Assessment

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Germ cell mutagenicity - : In vitro tests showed mutagenic effects

Assessment

poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)-#:

Germ cell mutagenicity -

: In vitro tests did not show mutagenic effects

Assessment



**TUQUE EXOGEM** 

Version Revisi 1.0 04/20/

Revision Date: SDS Number: 04/20/2023 S00064780268

This version replaces all previous versions.

benzovindiflupyr:

Germ cell mutagenicity -

Assessment

Animal testing did not show any mutagenic effects.

Carcinogenicity

**Components:** 

kaolin:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

fludioxonil:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Carcinogenicity - Assess-

ment

: Sufficient evidence of carcinogenicity in animal experiments

benzovindiflupyr:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a carcinogen, This substance has been reported to cause tumors in certain animal species., These is no evidence that these find-

ings are relevant to humans.

Reproductive toxicity

Components:

fludioxonil:

Reproductive toxicity - As-

sessment

No toxicity to reproduction

benzovindiflupyr:

Reproductive toxicity - As-

sessment

No toxicity to reproduction

STOT-single exposure

**Components:** 

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with respiratory tract

irritation.

benzovindiflupyr:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.



**TUQUE EXOGEM** 

Version 1.0

Revision Date: 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

STOT-repeated exposure

**Components:** 

fludioxonil:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

benzovindiflupyr:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

**SECTION 12. ECOLOGICAL INFORMATION** 

**Ecotoxicity** 

**Components:** 

fludioxonil:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.23 mg/l

Exposure time: 96 h

LC50 (Pimephales promelas (fathead minnow)): 0.7 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.4 mg/l

Exposure time: 48 h

EC50 (Americamysis): 0.27 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)):

0.259 mg/l

Exposure time: 96 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):

0.077 mg/l

End point: Growth rate Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0.43 mg/l

Exposure time: 96 h

NOEC (Skeletonema costatum (marine diatom)): 0.14 mg/l

End point: Growth rate Exposure time: 96 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.04 mg/l

Exposure time: 28 d

EC10 (Pimephales promelas (fathead minnow)): 0.018 mg/l

Exposure time: 116 d



**TUQUE EXOGEM** 

Version Revision Date: 1.0 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.035 mg/l

Exposure time: 21 d

NOEC (Americamysis): 0.018 mg/l

Exposure time: 28 d

Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5.8 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 6.0 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 4.5

mg/

Exposure time: 72 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):

0.28 mg/l

End point: Growth rate Exposure time: 72 h

poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)-#:

Toxicity to fish : LC50 (Fish): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Aquatic invertebrates (general)): 15 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (algae): 135 mg/l

Exposure time: 72 h

benzovindiflupyr:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.0091 mg/l

Exposure time: 96 h

LC50 (Cyprinus carpio (Carp)): 0.0035 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Americamysis): 0.056 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): >

0.89 mg/l

Exposure time: 96 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):



Version 1.0 Revision Date: 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

0.42 mg/l

End point: Growth rate Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0.55 mg/l

Exposure time: 72 h

NOEC (Skeletonema costatum (marine diatom)): 0.4 mg/l

End point: Growth rate Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.00095

mg/

Exposure time: 32 d Test Type: Early-life Stage

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Americamysis): 0.0074 mg/l

Exposure time: 28 d

EC10 (Daphnia magna (Water flea)): 0.012 mg/l

Exposure time: 21 d

Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h

### Persistence and degradability

#### **Components:**

fludioxonil:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 450 - 700 d

Remarks: Persistent in water.

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

Biodegradability : Result: Not readily biodegradable.

poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-

aminomethylethoxy)-#:

Biodegradability : Result: Not readily biodegradable.

benzovindiflupyr:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

**Components:** 

fludioxonil:

Bioaccumulation : Remarks: Does not bioaccumulate.



**TUQUE EXOGEM** 

Version Revision Date: 1.0 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

Partition coefficient: n-

octanol/water

log Pow: 4.12 (77 °F / 25 °C)

benzovindiflupyr:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: 4.3 (77 °F / 25 °C)

Mobility in soil

Components:

fludioxonil:

Distribution among environ-

mental compartments

Remarks: immobile

Stability in soil : Dissipation time: 14 d

Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

benzovindiflupyr:

Distribution among environ-

mental compartments

Remarks: Slightly mobile in soils

Other adverse effects

**Components:** 

fludioxonil:

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).

Oxirane, 2,2'-[1,3-phenylenebis(oxymethylene)]bis:

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).

benzovindiflupyr:

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).

**SECTION 13. DISPOSAL CONSIDERATIONS** 

Disposal methods

Waste from residues : Do not contaminate ponds, waterways or ditches with

chemical or used container.

Do not dispose of waste into sewer.



Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

Where possible recycling is preferred to disposal or

incineration.

If recycling is not practicable, dispose of in compliance with

local regulations.

Contaminated packaging : Empty remaining contents.

Triple rinse containers.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

#### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

**UNRTDG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(BENZOVINDIFLUPYR, FLUDIOXONIL)

Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3082

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

(BENZOVINDIFLUPYR, FLUDIOXONIL)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen: 964

ger aircraft)

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

964

(BENZOVINDIFLUPYR, FLUDIOXONIL)

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

## 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

Remarks : Shipment by ground under DOT is non-regulated; however it



Version 1.0 Revision Date: 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

### 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**

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

Harmful if swallowed.

Harmful if absorbed through skin.

Causes moderate eye irritation.

Avoid contact with skin, eyes or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove and wash contaminated clothing before re-use.

Wear long-sleeved shirt and long pants, socks, shoes, and gloves.

Wear protective eyewear, goggles, or face shields.

# SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Germ cell mutagenicity

Carcinogenicity

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

Oxirane, 2,2'- 101-90-6 >= 5 - < 10 %

[1,3phe-

nylenebis(oxymet hylene)]bis

#### **SECTION 16. OTHER INFORMATION**

### **Further information**

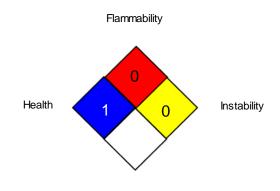


Version 1.0 Revision Date: 04/20/2023

SDS Number: S00064780268

This version replaces all previous versions.

#### NFPA 704:



Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

Syngenta : Syngenta Occupational Exposure Limits

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

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

Syngenta / TWA : Time weighted average

AllC - 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



Version Revision Date: SDS Number: This version replaces all previous versions. 1.0 04/20/2023 S00064780268

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 : 04/20/2023

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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