

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

SECTION 1. IDENTIFICATION

Product name : MURAL
Design code : A18126B

Product Registration number : 100-1479

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

SECTION 2. HAZARDS IDENTIFICATION

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

Combustible dust

Acute toxicity (Oral) : Category 4
Eye irritation : Category 2A
Skin sensitization : Category 1
Specific target organ toxicity : Category 2 (Bile duct)
- repeated exposure

GHS label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H373 May cause damage to organs (Bile duct) through prolonged or repeated exposure.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version 0.0 Revision Date: 07/10/2024 SDS Number: S00029838962 Date of last issue: 03/01/2017
Date of first issue: 03/01/2017

Precautionary Statements

:

Prevention:

P260 Do not breathe dust.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/ attention if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.

Disposal:

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

Other hazards

May form combustible dust concentrations in air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
limestone	1317-65-3	>= 30 - < 50
Azoxystrobin	131860-33-8	30
residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	>= 10 - < 20
benzovindiflupyr	1072957-71-1	15
dioxosilane	14808-60-7	>= 0.1 - < 1
methanol	67-56-1	>= 0.1 - < 1

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

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

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.
Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.

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 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

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.
Avoid dust formation.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

Conditions for safe storage : 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 (Form of exposure)	Control parameters / Permissible concentration	Basis
limestone	1317-65-3	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Total dust)	15 mg/m ³	OSHA P0
		TWA (respirable dust)	5 mg/m ³	OSHA P0

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version 0.0 Revision Date: 07/10/2024 SDS Number: S00029838962 Date of last issue: 03/01/2017
 Date of first issue: 03/01/2017

		fraction)		
		TWA (Respirable)	5 mg/m ³ (Calcium carbonate)	NIOSH REL
		TWA (total)	10 mg/m ³ (Calcium carbonate)	NIOSH REL
Azoxystrobin	131860-33-8	TWA	0.7 mg/m ³	Syngenta
benzovindiflupyr	1072957-71-1	TWA	1 mg/m ³	Syngenta
dioxosilane	14808-60-7	TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable particulate matter)	0.025 mg/m ³ (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m ³	NIOSH REL
		ST	250 ppm 325 mg/m ³	NIOSH REL
		TWA	200 ppm 260 mg/m ³	OSHA Z-1
		STEL	250 ppm 325 mg/m ³	OSHA P0
		TWA	200 ppm 260 mg/m ³	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

Engineering measures : THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

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. Where necessary, 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

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 breakthrough 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:

Dust impervious protective suit

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 : solid

Color : beige to dark brown

Odor : weak, uncharacteristic

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Odor Threshold : No data available

pH : > 8.50 - 10.50 (68 - 77 °F / 20 - 25 °C)
Concentration: 1 %w/v

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : May form combustible dust concentrations in air.

Burning number : 2 (68 °F / 20 °C)
2 (212 °F / 100 °C)

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 g/cm³

Bulk density : 0.56 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 : No data available

Decomposition temperature : No data available

Minimum ignition temperature : 500 °C

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

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

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Surface tension : 38.0 mN/m, 14.000 %, 68 °F / 20 °C

Minimum ignition energy : 100 - 300 mJ

Particle characteristics
Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : 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.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion
Inhalation
Skin contact
Eye contact

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : LD50 (Rat, female): 1,049 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.01 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Components:

Azoxystrobin:

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

Acute inhalation toxicity : LC50 (Rat, female): 0.698 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Assessment: The substance or mixture has no acute dermal toxicity

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

methanol:

Acute oral toxicity : Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : Assessment: The component/mixture is toxic after single contact with skin.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Result : No skin irritation

Components:

Azoxystrobin:

Species : Rabbit
Result : No skin irritation

benzovindiflupyr:

Species : Rabbit
Result : No skin irritation

methanol:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species : Rabbit

SAFETY DATA SHEET

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MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Result : Irritation to eyes, reversing within 21 days

Components:

Azoxystrobin:

Species : Rabbit
Result : No eye irritation

residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Result : Irritation to eyes, reversing within 21 days
Method : in vitro eye irritation test

benzovindiflupyr:

Species : Rabbit
Result : No eye irritation

methanol:

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

Product:

Species : Guinea pig
Result : The product is a skin sensitizer, sub-category 1B.

Components:

Azoxystrobin:

Species : Guinea pig
Result : Does not cause skin sensitization.

benzovindiflupyr:

Test Type : mouse lymphoma cells
Species : Mouse
Result : Does not cause skin sensitization.

methanol:

Species : Guinea pig
Result : Does not cause skin sensitization.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Product:

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

Components:

Azoxystrobin:

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

benzovindiflupyr:

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

methanol:

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

Carcinogenicity

Not classified due to lack of data.

Components:

Azoxystrobin:

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

benzovindiflupyr:

Carcinogenicity - Assessment : 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 findings are relevant to humans.

dioxosilane:

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

IARC has concluded that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational sources and in experimental animals from quartz and cristobalite (Group 1). It was noted however, that carcinogenicity was not detected in all industrial circumstances and may be dependent on inherent characteristics of the crystalline silica or external factors affecting its biological activity.

methanol:

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

IARC Group 1: Carcinogenic to humans
dioxosilane

14808-60-7

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

(Silica dust, crystalline)

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 Known to be human carcinogen
dioxosilane 14808-60-7
(Silica, Crystalline (Respirable Size))

Reproductive toxicity

Not classified due to lack of data.

Components:

Azoxystrobin:

Reproductive toxicity - Assessment : No toxicity to reproduction, No effects on or via lactation

benzovindiflupyr:

Reproductive toxicity - Assessment : No toxicity to reproduction

methanol:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT-single exposure

Not classified due to lack of data.

Components:

benzovindiflupyr:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

methanol:

Target Organs : Eyes, Central nervous system

Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT-repeated exposure

May cause damage to organs (Bile duct) through prolonged or repeated exposure.

Components:

Azoxystrobin:

Target Organs : Bile duct

Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

benzovindiflupyr:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

dioxosilane:

Routes of exposure : Inhalation
Target Organs : Lungs
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

methanol:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified due to lack of data.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.032 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.22 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.97 mg/l
Exposure time: 96 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.3 mg/l
End point: Growth rate
Exposure time: 96 h

Components:

Azoxystrobin:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.47 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.28 mg/l
Exposure time: 48 h

EC50 (Americamysis): 0.055 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 1.109 mg/l
Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.0303 mg/l

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

- End point: Growth rate
Exposure time: 72 h
- ErC50 (Skeletonema costatum (marine diatom)): 0.250 mg/l
Exposure time: 72 h
- NOEC (Skeletonema costatum (marine diatom)): 0.010 mg/l
End point: Growth rate
Exposure time: 72 h
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.16 mg/l
Exposure time: 28 d
- EC10 (Pimephales promelas (fathead minnow)): 0.2197 mg/l
Exposure time: 33 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.044 mg/l
Exposure time: 21 d
- NOEC (Americamysis): 0.00954 mg/l
Exposure time: 28 d
- Toxicity to microorganisms : IC50 (Pseudomonas putida): > 3.2 mg/l
Exposure time: 6 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)): 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 toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.00095 mg/l
Exposure time: 32 d

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Test Type: Early-life Stage

Toxicity to daphnia and other aquatic invertebrates (Chronic 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:

Azoxystrobin:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 224 d
Remarks: Persistent in water.

residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Biodegradability : Result: Not readily biodegradable.

benzovindiflupyr:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Components:

Azoxystrobin:

Bioaccumulation : Remarks: Does not bioaccumulate.

benzovindiflupyr:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 4.3 (77 °F / 25 °C)

Mobility in soil

Components:

Azoxystrobin:

Distribution among environmental compartments : Remarks: Low mobility in soil.

Stability in soil : Dissipation time: 81.3 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

benzovindiflupyr:

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Distribution among environmental compartments : Remarks: Slightly mobile in soils

Other adverse effects

Components:

Azoxystrobin:

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

benzovindiflupyr:

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

methanol:

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (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.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.
This product will not be classified as a RCRA characteristic hazardous waste when discarded.

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 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (AZOXYSTROBIN, BENZOVINDIFLUPYR)
Class : 9
Packing group : III
Labels : 9

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

Environmentally hazardous : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

IATA-DGR

UN/ID No. : UN 3077
Proper shipping name : Environmentally hazardous substance, solid, n.o.s. (AZOXYSTROBIN, BENZOINDIFLUPYR)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 956
Packing instruction (passenger aircraft) : 956
Environmentally hazardous : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

IMDG-Code

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (AZOXYSTROBIN, BENZOINDIFLUPYR)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

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 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.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
0.0	07/10/2024	S00029838962	Date of first issue: 03/01/2017

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.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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.

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 : Combustible dust
Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)
Serious eye damage or eye irritation

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.

California Prop. 65

WARNING: This product can expose you to chemicals including dioxosilane, which is/are known to the State of California to cause cancer, and methanol, 108-88-3, 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.

California Regulated Carcinogens

dioxosilane

14808-60-7

SECTION 16. OTHER INFORMATION

Further information

SAFETY DATA SHEET

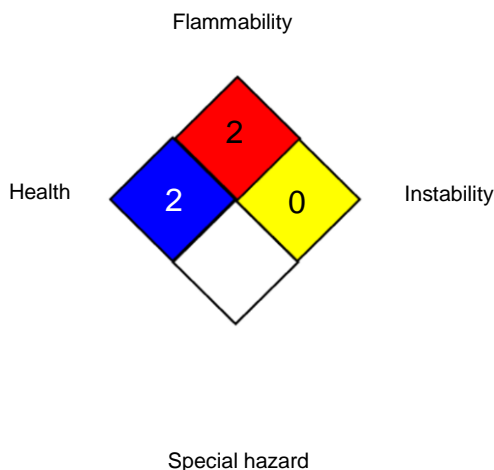
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MURAL

Version 0.0 Revision Date: 07/10/2024 SDS Number: S00029838962 Date of last issue: 03/01/2017
Date of first issue: 03/01/2017

NFPA 704:



HMIS® IV:

HEALTH	*	2
FLAMMABILITY		2
PHYSICAL HAZARD		0

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)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
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 Limits for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
Syngenta	:	Syngenta Occupational Exposure Limits
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA	:	8-hour time weighted average
OSHA P0 / STEL	:	Short-term exposure limit
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-3 / TWA	:	8-hour time weighted average
Syngenta / TWA	:	Time weighted average

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

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



MURAL

Version	Revision Date:	SDS Number:	Date of last issue: 03/01/2017
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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; TECL - 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 : 07/10/2024

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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