

Product no. -/2420-01
Product name **Azaka, 2420-01, 250 g/l AZOXYSTROBIN SC**

May 2013
Supersedes July 2012

Safety data sheet according to EU Reg. 1907/2006 as amended

Page 1 of 14

SAFETY DATA SHEET

Azaka, 2420-01, 250 g/l AZOXYSTROBIN SC

Revision: Sections containing a revision or new information are marked with a ♣.

♣ SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. **Product identifier** **Azaka, 2420-01, 250 g/l AZOXYSTROBIN SC**
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against** Can be used as fungicide only.
- 1.3. **Details of the supplier of the safety data sheet** **CHEMINOVA A/S**
P.O. Box 9
DK-7620 Lemvig
Denmark
sds@cheminova.dk
- 1.4. **Emergency telephone number** ... (+45) 97 83 53 53 (24 h; for emergencies only)

♣ SECTION 2: HAZARDS IDENTIFICATION

- 2.1. **Classification of the substance or mixture** See section 16 for full text of hazard statements and R-phrases.
- CLP classification of the product according to Reg. 1272/2008 as amended Hazards to the aquatic environment: Acute Category 1 (H400)
Chronic Category 1 (H410)
- DPD classification of the product according to Dir. 1999/45/EC as amended N;R50/53
- WHO classification Class III: Slightly hazardous
Guidelines to Classification 2009
- Health hazards Azoxystrobin is toxic by inhalation. The product may present an inhalation hazard, depending on size and thereby inhalability of aerosol droplets.
- Environmental hazards The product is very toxic to aquatic organisms.

2.2. Label elements

According to EU Reg. 1272/2008 as amended

Product identifier 2420-01, 250 g/l Azoxystrobin SC

Hazard pictogram (GHS09)



Signal word Warning

Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

Supplementary hazard statements

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions of use.

Supplementary phrase for final use of the product for plant protection: SP1

Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container as hazardous waste.

According to Dir. 1999/45/EC as amended

Hazard symbol N



Dangerous
for the
environment

Contains azoxystrobin

R-phrase

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Other mentions

Contains 1,2-benzisothiazol-3(2H)-one. May cause an allergic reaction.
To avoid risks to man and the environment, comply with the instructions for use.

Additional phrases for final use of the product for plant protection

S2 Keep out of the reach of children.

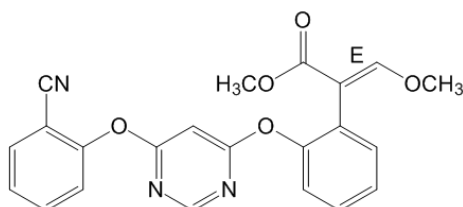
S23	Do not breathe spray.
S29	Do not empty into drains.
SP1	Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
2.3. Other hazards	None of the ingredients in the product meets the criteria for being PBT or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances	The product is a mixture, not a substance.
3.2. Mixtures	See section 16 for full text of hazard statements and R-phrases.

Active ingredient

Azoxystrobin	Content: 23% by weight
CAS name	Benzeneacetic acid, 2-[[6-(2-cyanophenoxy)-4-pyrimidinyl]oxy]- α -(methoxymethylene)-, methyl ester, (α E)-
CAS no.	131860-33-8
IUPAC name	Methyl (E)-2-{2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate
ISO name/EU name	Azoxystrobin
EC no. (list no.)	603-524-3
EU index no.	607-256-00-8
CLP classification of the ingredient	Inhalation toxicity: Category 3 (H331) Hazards to the aquatic environment: Acute Category 1 (H400) Chronic Category 1 (H410)
DSD classification of the ingredient	T;R23 N;R50/53
Structural formula	



Reportable ingredients

	Content (% w/w)	CAS no.	EC no. (EINECS no.)	CLP classification	DSD classification
Propylene glycol	10	57-55-6	200-338-0	None	None
Sodium alkyl naphthalene sulphonate-formaldehyde condensate	4	577773-56-9	None	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	Xi;R36/38 Irritant
Bentonite	1	1302-78-9	215-108-5	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	Xi;R36/37/38 Irritant

1,2-Benzisothiazol-3(2H)-one	0.02	2634-33-5	220-120-9	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)	Xn;R22 Xi;R38-41 R43 N;R50 Harmful, dangerous for the environment
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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation	If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
Skin contact	Immediately flush skin with water while removing contaminated clothing and footwear. Wash with water and soap. See physician if any symptom develops.
Eye contact	Immediately rinse eyes with much water or eyewash solution, occasionally opening eyelids, until no evidence of chemical remains. Remove contact lenses after a few minutes and rinse again. See physician if irritation develops.
Ingestion	Let the exposed person rinse mouth and let him/her drink several glasses of water or milk, but do not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink fluids again. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Primarily irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required in case of ingestion.

It may be helpful to show this safety data sheet to physician.

Note to physician

There is no specific antidote for exposure to this material. Gastric lavage and/or the administration of activated charcoal can be considered. After decontamination, treatment should be directed at the control of symptoms and the clinical condition. Pay special attention to respiratory symptoms.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Dry chemical or carbon dioxide for small fires, water spray or foam for large fires. Avoid heavy hose streams.

5.2. Special hazards arising from the substance or mixture

The essential breakdown products are volatile, toxic, irritant and inflammable compounds such as nitrogen oxides, hydrogen cyanide, sulphur dioxide, carbon monoxide and carbon dioxide.

5.3. Advice for firefighters

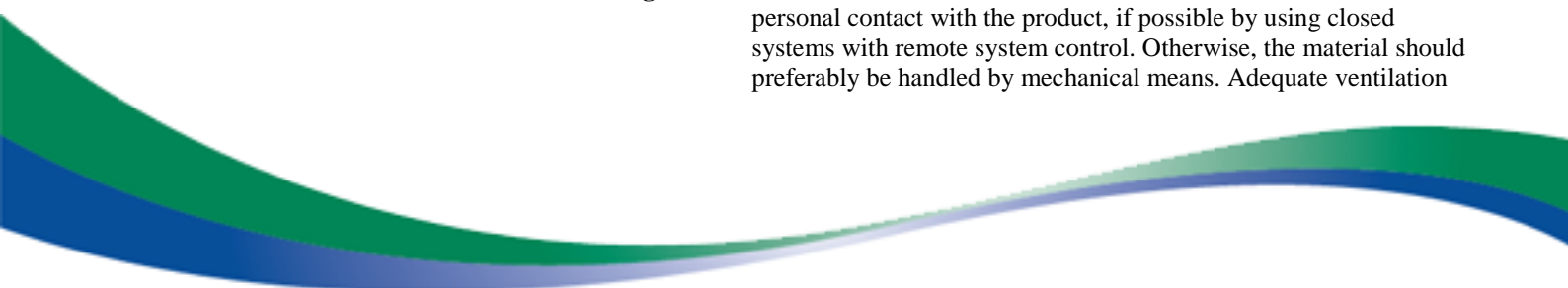
Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from protected location or maximum possible distance. Dike area to prevent water runoff. Firemen should wear self-contained breathing apparatus and

protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. **Personal precautions, protective equipment and emergency procedures**
- It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.
- In case of large spill (involving 10 tons of the product or more):
1. Use personal protection equipment; see section 8
 2. Call emergency telephone no.; see section 1
 3. Alert authorities.
- Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots.
- Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area. Avoid and reduce vapour or mist formation as much as possible.
- 6.2. **Environmental precautions**
- Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.
- 6.3. **Methods and materials for containment and cleaning up**
- It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. See GHS (Annex 4, Section 6).
- Surface water drains should be covered if appropriate. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, hydrated lime, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with much water and detergent. Absorb wash liquid onto absorbent and transfer to suitable containers. The used containers should be properly closed and labelled.
- Large spills which soak into the ground should be dug up and transferred to suitable containers.
- Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.
- 6.4. **Reference to other sections**
- See subsection 8.2. for personal protection.
See section 13 for disposal.

SECTION 7: HANDLING AND STORAGE

- 7.1. **Precautions for safe handling**
- In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. Otherwise, the material should preferably be handled by mechanical means. Adequate ventilation
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or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.

For its use as a pesticide, first look for precautions and personal protection measures on the officially approved label on the packaging or for other official guidance or policy in force. If these are lacking, see section 8.

Keep all unprotected persons and children away from working area.

Avoid contact with eyes, skin or clothing. Avoid breathing vapour or mist.

Remove contaminated clothing immediately. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and footwear. Take a shower, using water and soap. Wear only clean clothes when leaving job. Wash protective clothing and protective equipment with water and soap after each use.

Do not discharge to the environment. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

7.2. Conditions for safe storage, including any incompatibilities

The product is stable under normal conditions of warehouse storage. Storage temperature: 5 - 30°C. Protect from frost and extreme heat.

Store in tightly closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

7.3. Specific end use(s)

The product is a registered pesticide which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

♣ SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Personal exposure limits

To our knowledge not established for azoxystrobin in this product. An internal PEL of 1.5 mg/m³ (8-hr TWA) is recommended by the manufacturer for azoxystrobin.

Propylene glycol

AIHA (USA) WEEL
MAK (Germany)
HSE (UK) WEL

Year

2013	10 mg/m ³
2012	Cannot be established at present
2007	8-hr TWA 150 ppm (474 mg/m ³), total (vapour and particulates)

However, other personal exposure limits defined by local regulations may exist and must be observed.

Azoxystrobin

DNEL, systemic	0.2 mg/kg bw/day
PNEC, aquatic	0.88 µg/l

8.2. Exposure controls

When used in a closed system, personal protection equipment will not be required. The following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping systems non-hazardous before opening.

The precautions mentioned below are primarily meant for handling of the undiluted product and for preparing the spray solution, but can be recommended for spraying as well.



Respiratory protection

Inhalation is not usually a hazard, but breathing of finely divided mist must be avoided. In the event of an accidental discharge of the material workers must put on officially approved respiratory protection equipment with a universal filter type including particle filter.



Protective gloves

Wear chemical resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or viton. The breakthrough times of these materials for the product are unknown, but it is expected that they will give adequate protection.



Eye protection

Wear safety glasses. It is recommended to have an emergency eye wash fountain immediately available in the work area when there is a potential for eye contact.



Other skin protection

Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of PE will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of appreciable or prolonged exposure, coveralls of barrier laminate may be required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on physical and chemical properties

Appearance	Light brown liquid
Odour	Weak, ammonia-like
Odour threshold	Not determined
pH	Undiluted: 7.7 at 20°C 1% solution in water: 6.4 - 6.7 at 20°C
Melting point/freezing point	Not determined
Initial boiling point and boiling range	Not determined
Flash point	157°C (Miniflash closed cup)
Evaporation rate	Not determined
Flammability (solid/gas)	Not applicable (liquid)

Upper/lower flammability or explosive limits	Not determined
Vapour pressure	Azoxystrobin : 1.107×10^{-10} Pa at 20°C
Vapour density	Not determined
Relative density	Not determined
	Density: 1.10 g/ml
Solubility(ies)	Azoxystrobin : 6.7 mg/l at pH 7 in water low solubility in hexane, n-octanol moderate solubility in methanol, toluene, acetone high solubility in ethyl acetate, acetonitrile, dichloromethane
Partition coefficient n-octanol/water	Azoxystrobin : $\log K_{ow} = 2.5$ at 20°C
Autoignition temperature	> 400°C if any
Decomposition temperature	Not determined
Viscosity	Non-newtonian fluid: viscosity is dependent on shear rate. Shear rate 0.1/s: > 10000 mPa.s Shear rate 50/s: > 50 mPa.s
Explosive properties.....	Not explosive
Oxidising properties	Not oxidising

9.2. **Other information**

Miscibility	The product is miscible with water.
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	To our knowledge, the product has no special reactivities.
10.2. Chemical stability	The product is stable during normal handling and storage at ambient temperatures.
10.3. Possibility of hazardous reactions	None known.
10.4. Conditions to avoid	Heating of the product will evolve harmful and irritant vapours.
10.5. Incompatible materials	None known.
10.6. Hazardous decomposition products	See subsection 5.2.

♣ SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects	* = Based on available data, the classification criteria are not met.
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Product

Acute toxicity	The product is not considered as harmful by ingestion, skin contact or by inhalation. * However, since the active ingredient azoxystrobin is toxic by inhalation, this product may become hazardous when a finely divided mist is produced. The acute toxicity of the product is measured as:
Route(s) of entry	
- ingestion	LD ₅₀ , oral, rat: > 2000 mg/kg (method OECD 425)
- skin	LD ₅₀ , dermal, rat: > 2000 mg/kg (method OECD 402)
- inhalation	LC ₅₀ , inhalation, rat: > 2.33 mg/l/4 h (method OECD 403)

Skin corrosion/irritation	Not irritating to skin. (method OECD 404) *
Serious eye damage/irritation	Mildly irritating to eyes (method OECD 405). *
Respiratory or skin sensitisation ...	Not an allergic sensitizer (method OECD 429). *
Aspiration hazard	The product does not present an aspiration pneumonia hazard. *
Symptoms and effects, acute and delayed	Inhalation may result in difficulty breathing. Ingestion may cause diarrhoea. Eye contact may cause irritation.

Azoxystrobin

Acute toxicity	Azoxystrobin is toxic by inhalation. It is not considered as harmful by skin contact or by ingestion. The acute toxicity is measured as:
Route(s) of entry - ingestion	LD ₅₀ , oral, rat: > 5000 mg/kg (method OECD 401) *
- skin	LD ₅₀ , dermal, rat: > 2000 mg/kg (method OECD 402) *
- inhalation	LC ₅₀ , inhalation, rat (male): 0.963 mg/l/4 h (method OECD 403) LC ₅₀ , inhalation, rat (female): 0.698 mg/l/4 h
Skin corrosion/irritation	Slightly irritating to skin (method OECD 404). *
Serious eye damage/irritation	Slightly irritating to eyes (method OECD 405). *
Respiratory or skin sensitisation ...	Not sensitising (method OECD 406). *
Germ cell mutagenicity	Results from tests on germ cells are not available. Some positive results were found in <i>in vitro</i> tests (method OECD 473), but not in <i>in vivo</i> tests (method OECD 474). *
Carcinogenicity	No indications of carcinogenic effects are found for azoxystrobin (methods OECD 451 and 453). *
Reproductive toxicity	No effects on fertility are found for azoxystrobin (3 studies). No indications of teratogenic (birth defect causing) effects of azoxystrobin are found (3 studies). *
STOT – single exposure	No specific effects after single exposure to azoxystrobin have been observed. *
STOT – repeated exposure	Target organ: liver LOEL: 2000 ppm (210 mg/kg bw/day) in a 90-day rat study. At this exposure level, decreased activity of ALT, AST, alkaline phosphatase and creatine kinase was found (method OECD 408). *

Sodium alkylnaphthalene sulphonate-formaldehyde condensate

Acute toxicity	The substance is not considered harmful by single exposure. *
Route(s) of entry - ingestion	LD ₅₀ , oral, rat: > 4500 mg/kg
- skin	LD ₅₀ , dermal, rat: not available
- inhalation	LC ₅₀ , inhalation, rat: not available
Skin corrosion/irritation	Irritating to skin.

Serious eye damage/irritation	Irritating to eyes.
STOT – single exposure	Inhalation of dust can cause irritation of airways. It is not clear if the criteria for classification are met.
<u>Bentonite</u>	
Acute toxicity	Bentonite is not acutely harmful. *
Route(s) of entry - ingestion	LD ₅₀ , oral, rat: > 2000 mg/kg (method OECD 425)
- skin	LD ₅₀ , dermal, rat: not available
- inhalation	LC ₅₀ , inhalation, rat: not available
Skin corrosion/irritation	Not irritating to skin (method OECD 404).
Serious eye damage/irritation	Not irritating to eyes (method OECD 405).
Respiratory or skin sensitisation ...	Not sensitising. *
Germ cell mutagenicity	Results from tests on germ cells are not available. Results from other tests are negative. *
Carcinogenicity	No data are available. Based on comparison to similar substance, carcinogenicity is not expected. *
Reproductive toxicity	No indications of teratogenic (birth defect causing) effects are found in two studies. *
STOT – single exposure	No specific effects after single exposure have been observed.
STOT – repeated exposure	Target organ: liver Liver damage was noted at very high dose levels in oral studies with mice. Lungs can be affected at repeated high-dose exposure by inhalation according to case reports in humans. *
<u>1,2-Benzisothiazol-3(2H)-one</u>	
Acute toxicity	The substance is harmful by ingestion.
Route(s) of entry - ingestion	LD ₅₀ , oral, rat (male): 670 mg/kg LD ₅₀ , oral, rat (female): 784 mg/kg (method OPPTS 870.1100; measured on 73% solution)
- skin	LD ₅₀ , dermal, rat: > 2000 mg/kg * (method OPPTS 870.1200; measured on 73% solution)
- inhalation	LC ₅₀ , inhalation, rat: not available
Skin corrosion/irritation	Slightly irritating to skin (method OPPTS 870.2500).
Serious eye damage/irritation	Severely irritating to eyes (method OPPTS 870.2400).
Respiratory or skin sensitisation ...	Moderate dermal sensitizer to guinea pigs (method OPPTS 870.2600). The substance appears to be significantly more sensitising to humans.
Germ cell mutagenicity	All acceptable mutagenicity studies showed a negative mutagenic

response for this chemical. *

Carcinogenicity	Short term tests and a consideration of the structure have shown that the substance is not likely to present a carcinogenic hazard to man. *
Reproductive toxicity	The reproduction study did not show evidence of increased susceptibility of offspring. Developmental effects consisted of slightly delayed ossification. *

♣ SECTION 12: ECOLOGICAL INFORMATION

- 12.1. **Toxicity** The product is toxic to aquatic invertebrates. It is harmful to fish and may be harmful to plants. It is considered as less toxic to insects, birds and soil micro- and macroorganisms.

The ecotoxicity measured on the product is:

- Fish	Rainbow trout (<i>Oncorhynchus mykiss</i>)	96-h LC ₅₀ : 1.91 mg/l
- Invertebrates	Daphnids (<i>Daphnia magna</i>)	48-h EC ₅₀ : 0.67 mg/l
- Algae	Diatoms (<i>Navicula pelliculosa</i>)	72-h EC ₅₀ : 3.10 mg/l
- Plants	Duckweed (<i>Lemna gibba</i>)	7-day EC ₅₀ : 15.4 mg/l
- Earthworms	<i>Eisenia fetida</i>	14-day LD ₅₀ : > 1000 mg/kg dry soil
- Bees	Honey bees (<i>Apis mellifera</i>)	48-h LD ₅₀ , contact: > 432 µg/bee 48-h LD ₅₀ , oral: > 519 µg/bee

- 12.2. **Persistence and degradability** **Azoxystrobin** does not meet the criteria for being readily biodegradable, but it is degraded in the environment. Degradation occurs both by photolysis and by microbiological degradation. Primary degradation half-lives vary with circumstances, but are usually a few weeks in aerobic soil and water.

The product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

- 12.3. **Bioaccumulative potential** See section 9 for octanol-water partition coefficient.

Bioaccumulation of **azoxystrobin** is not expected.

- 12.4. **Mobility in soil** Under normal conditions **azoxystrobin** has low to moderate mobility in soil.

- 12.5. **Results of PBT and vPvB assessment** None of the ingredients meets the criteria for being PBT or vPvB.

- 12.6. **Other adverse effects** Other relevant hazardous effects in the environment are not known.

♣ SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. **Waste treatment methods** Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste.

Disposal of waste and packagings must always be in accordance

with all applicable local regulations.

Disposal of product According to the Waste Framework Directive (2008/98/EC), possibilities for reuse or reprocessing should first be considered. If this is not feasible, the material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Disposal of packaging Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: TRANSPORT INFORMATION

ADR/RID/IMDG/IATA/ICAO classification

- | | |
|--|--|
| 14.1. UN number | 3082 |
| 14.2. UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (azoxystrobin) |
| 14.3. Transport hazard class(es) | 9 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | Marine pollutant |
| 14.6. Special precautions for user | Do not discharge to the environment. |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | The product is not transported in bulk tankers. |

♣ SECTION 15: REGULATORY INFORMATION

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|--|---|
| 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture | Seveso category in Annex I, part 2, to Dir. 96/82/EC: dangerous for the environment.

All ingredients in this product are covered by EU chemical legislation. |
| 15.2. Chemical safety assessment | A chemical safety assessment is not required to be included for this product. |

♣ SECTION 16: OTHER INFORMATION

Relevant changes to the safety data sheet Minor corrections only

List of abbreviations	AIHA	American Industrial Hygiene Association
	ALT	Alanine transaminase
	AST	Aspartate transaminase
	CAS	Chemical Abstracts Service
	CLP	Classification, Labelling and Packaging; refers to EU

	regulation 1272/2008 as amended
Dir.	Directive
DNEL	Derived No Effect Level
DPD	Dangerous Preparation Directive; refers to EU directive 1999/45/EC
DSD	Dangerous Substance Directive; refers to EU directive 67/548/EEC
EC	European Community
EC ₅₀	50% Effect Concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
GHS	Globally Harmonized classification and labelling System of chemicals, Fourth revised edition 2011
HSE	Health & Safety Executive, UK
IBC	International Bulk Chemical code
ISO	International Organisation for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	50% Lethal Concentration
LD ₅₀	50% Lethal Dose
LOEL	Lowest Observed Effect Level
MAK	Maximale Arbeitsplatz-Konzentration
MARPOL	Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution
N.o.s.	Not otherwise specified
OECD	Organisation for Economic Cooperation and Development
OPPTS	Office of Prevention, Pesticides and Toxic Substances
PBT	Persistent, Bioaccumulative, Toxic
PE	Polyethylene
PEL	Personal Exposure Limit
PNEC	Predicted No Effect Concentration
Reg.	Regulation
R-phrases	Risk phrase
SC	Suspension Concentrate
SP	Safety Precaution
S-phrases	Safety phrase
STOT	Specific Target Organ Toxicity
TWA	Time Weighted Average
vPvB	very Persistent, very Bioaccumulative
WEEL	Workplace Environmental Exposure Level
WEL	Workplace Exposure Limit
WHO	World Health Organisation

References Data measured on the product are unpublished company data. Data on ingredients are available from published literature and can be found several places.

Method for classification Test data

Used CLP hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH401 To avoid risks to human health and the environment, comply with the instructions of use.

Used R-phrases R22 Harmful if swallowed.
R23 Toxic by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R50 Very toxic to aquatic organisms.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Advice on training This material should only be used by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product vary and situations unforeseen by Cheminova A/S may exist. The user has to check the validity of the information under local circumstances.

Prepared by: Cheminova A/S
Safety, Health, Environment & Quality Department / GHB

