

Product no. 58A/5810
Product name **AZZURO 500 g/l SC**February 2012
Supersedes August 2011

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SAFETY DATA SHEET

AZZURO 500 g/l 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** **FLUAZINAM 500 g/l SC**
Contains fluazinam and 1,2-benzisothiazol-3(2H)-one
- Trade name **SIGNAL**
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against** Can be used as fungicide only. The product is shipped ready for the end-user or may need to be filled into its final containers.
- 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 R-phrases and hazard statements.
- DPD classification of the product according to Dir. 1999/45/EC as amended Xi;R36 R43 Rep3;R63 N;R50/53
- CLP classification of the product according to Reg. 1272/2008 as amended Eye irritation: Category 2 (H319)
Sensitisation – skin: Category 1B (H317)
Toxic to reproduction: Category 2 (H361D)
Hazards to the aquatic environment: Acute Category 1 (H400)
Chronic Category 2 (H410)
- WHO classification Class U (Unlikely to present acute hazard in normal use)
Guidelines to Classification 2009
- Health hazards The product may cause moderate to severe but temporary irritation to eyes and mild irritation to skin.
- Fluazinam can cause allergic sensitisation. It may harm the unborn child.
- Environmental hazards The product is very toxic to aquatic organisms.

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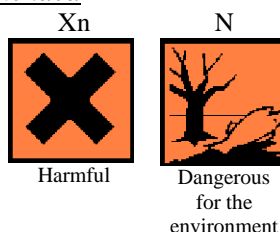
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2.2. Label elements

According to Dir. 1999/45/EC as amended

Hazard symbols



Contains fluazinam and 1,2-benzisothiazol-3(2H)-one

R-phrases

R36	Irritating to eyes.
R43	May cause sensitisation by skin contact.
R63	Possible risk of harm to the unborn child.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
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 mention	To avoid risks to man and the environment, comply with the instructions of use.
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Additional phrases for final use of the product for plant protection

S2	Keep out of the reach of children.
S13	Keep away from food, drink and animal feedingstuffs.
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).

According to EU Reg. 1272/2008 as amended

Product identifier	Fluazinam 500 g/l SC Contains fluazinam and 1,2-benzisothiazol-3(2H)-one
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Hazard pictograms (GHS07, GHS08, GHS09)



Signal word	Warning
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Hazard statements

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H361D	Suspected of damaging the unborn child.
H410	Very toxic to aquatic life with long lasting effects.

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Supplementary hazard statements
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

P261
P280
P273
P305+P351+P338.....

Avoid breathing vapours.
Wear protective gloves and eye/face protection.
Avoid release to the environment.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
Dispose of contents/container as hazardous waste.

P302+P352
P501

2.3. **Other hazards**

None of the ingredients 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 R-phrases and hazard statements.

Active ingredient

Fluazinam
CAS name

Content: 38% by weight
2-Pyridinamine, 3-chloro-N-[3-chloro-2,6-dinitro-4-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-
79622-59-6

CAS no.
IUPAC name

3-Chloro-N-(3-chloro-5-trifluoromethyl-2-pyridyl)- α,α,α -trifluoro-2,6-dinitro-p-toluidine

ISO name
EC no. (list no.)
EU index no.

Fluazinam

616-712-5

DSD classification of the ingredient
CLP classification of the ingredient

None

Xn;R20 Xi;R36 R43 Rep3;R63 N;R50/53

Acute inhalation toxicity: Category 4 (H332)

Eye irritation: Category 2 (H319)

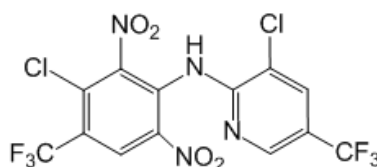
Sensitisation – skin: Category 1A (H317)

Toxic to reproduction: Category 2 (H361D)

Hazards to the aquatic environment: Acute Category 1 (H400)

Chronic Category 1 (H410)

Structural formula



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Reportable ingredients

	Content (% w/w)	CAS no.	EC no.	DSD classification	CLP classification
Sodium alkylnaphthalene sulphonate- formaldehyde condensate	2	577773-56-9	—	Xi;R36/38 Irritant	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
Alcohols, C13-C15, ethoxylated Reg. no. 02- 195485515-35	1	64425-86-1	List no.: 613-595-2	Xn;R22 Xi;R41 N;R50 Harmful, dangerous for the environment	Acute Tox. 1 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400)
1,2-Benzisothia- zol-3(2H)-one	0.02	2634-33-5	EINECS no.: 220-120-9	Xn;R22 Xi;R38-41 R43 N;R50 Harmful, dangerous for the environment	Acute Tox. 4 * (H302) Skin Irrit. 2 (H315) Eye Irrit. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)

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 remove contaminated clothing and footwear. Flush skin with much water. Wash with water and soap. See physician if irritation 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. Get medical attention immediately.
Ingestion	Let the exposed person rinse mouth and drink several glasses of water or milk, but do not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink several glasses of fluid 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

Irritation and allergic reactions. The symptoms of the allergic effect range from mildly itchy, papular rash to painful, weeping and blistering dermatitis.

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

Immediate medical attention is required in case of ingestion and eye contact.

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

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

SECTION 5: FIREFIGHTING 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, malodorous, toxic, irritant and inflammable compounds such as hydrogen fluoride, hydrogen chloride, nitrogen oxides, sulphur dioxide, carbon monoxide, carbon dioxide and various fluorinated and chlorinated organic compounds.
- 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, sealable 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 boots.
- Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area. Avoid and reduce mist formation as much as possible. Personal contact with the product must be avoided.
- 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).
- If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, Fuller's earth or other

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absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with detergent and much water. Absorb wash liquid with absorbent and transfer to suitable containers. The used containers should be properly closed and labelled.

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. of personal protection.
See section 13 for disposal.

♣ SECTION 7: HANDLING AND STORAGE

- 7.1. **Precautions for safe handling** Pregnant women should not work with this product.

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 be handled by mechanical means as much as possible. Adequate ventilation 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.

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. Protect from strong sunlight and heat. Recommended storage temperature 5 - 30°C.

Keep in 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

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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, personal exposure limits have not been established for fluazinam or any other ingredient in this product. An 8-hr TWA exposure limit of 0.7 mg/m³ is recommended by the manufacturer for fluazinam. However, other personal exposure limits defined by local regulations may exist and must be observed.

Fluazinam

DNEL, systemic

0.041 mg/kg bw/day

PNEC, aquatic

0.53 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.

In cases of incidental high exposure, maximal personal protection may be necessary, such as respirator, face mask, chemical resistant coveralls.

If allergic reactions occur, it may be necessary to isolate the person from the product.



Respiratory protection

In the event of an uncontrolled discharge of the material, workers should 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 or nitrile rubber. The breakthrough time of these materials for this product are unknown. Generally, however, the use of protective gloves will give only partial protection against dermal exposure. Small tears in the gloves and cross-contamination can easily occur. It is recommended to limit the work to be done manually and to change the gloves regularly. Before removing gloves, wash them with water and soap.



Eye protection

Wear face mask rather than safety glasses. It is recommended to have an eye wash fountain immediately available in the workplace 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

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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 yellow to light red-brown liquid
Odour	Practically odourless
Odour threshold	Not determined
pH	7.5 - 8.3
Melting point/freezing point	Not determined (< 0°C)
Initial boiling point and boiling range	Not determined (> 100°C)
Flash point	Above 103°C if any (Pensky-Martens closed cup)
Evaporation rate	Not determined
Flammability (solid/gas)	Not applicable (the product is a liquid)
Upper/lower flammability or explosive limits	Not determined
Vapour pressure	Fluazinam : 1.1×10^{-3} Pa at 20°C
Vapour density	Not determined
Relative density	1.28 at 20°C
Solubility(ies)	Solubility of fluazinam in:
	acetone 625 g/l
	ethyl acetate 624 g/l
	dichloroethane 485 g/l
	methanol 162 g/l
	ethyl ether 168 g/l
	n-hexane 6.7 g/l
	toluene 512 g/l
	water 0.025 mg/l at pH 5.5
	0.071 mg/l at pH 7.0
	350 mg/l at pH 11.0
Partition coefficient n-octanol/water	Fluazinam : $\log K_{ow} = 3.56$ at 25°C
Autoignition temperature	Above 400°C if any
Decomposition temperature	Not determined
Viscosity	1400 - 7000 mPa.s, depending on shear rate
Explosive properties	Not explosive
Oxidising properties	Not oxidising

9.2. Other information

Miscibility	The product is dispersible in 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	Stable at ambient temperatures.
10.3. Possibility of hazardous reactions	None known.
10.4. Conditions to avoid	Heating of the product will produce harmful and irritant vapours.
10.5. Incompatible materials	None known.

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10.6. **Hazardous decomposition products** See subsection 5.2.

SECTION 11: TOXICOLOGICAL INFORMATION
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11.1. Information on toxicological effects
Product

Acute toxicity	The product is not considered as toxic by single exposures. The acute toxicity 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: > 3.56 mg/l/4 h (method OECD 403)
	Based on available data, the classification criteria are not met. (B.o.a.d.t.c.c.a.n.m.)
Skin corrosion/irritation	Mildly irritating to skin (method OECD 404). B.o.a.d.t.c.c.a.n.m.
Serious eye damage/irritation	The product may cause moderate to severe but temporary irritation to eyes (method OECD 405).
Respiratory or skin sensitisation	Sensitising to skin. (method OECD 429).
Aspiration hazard	The product does not present an aspiration hazard. B.o.a.d.t.c.c.a.n.m.
Symptoms and effects, acute and delayed	Irritation and allergic reactions. The symptoms of the allergic effect range from mildly itchy, papular rash to painful, weeping and blistering dermatitis. In animal tests, the main symptoms after oral intake were disturbance of respiration and decreased activity.

Fluazinam

Acute toxicity	Fluazinam is harmful by inhalation. The acute toxicity 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 (male): 1.68 mg/l/4 h (method OECD 403)
Skin corrosion/irritation	Slightly irritating to skin (method OECD 404). B.o.a.d.t.c.c.a.n.m.
Serious eye damage/irritation	Moderately irritating to eyes (method OECD 405).
Respiratory or skin sensitisation	Sensitising (method OECD 429).
Germ cell mutagenicity	Results from tests in germ cells are not available. Fluazinam was negative in a range of other tests. B.o.a.d.t.c.c.a.n.m.
Carcinogenicity	No carcinogenic effects were observed for fluazinam (method OECD 452). B.o.a.d.t.c.c.a.n.m.
Reproductive toxicity	No effects on fertility are found for fluazinam at maternal non-toxic doses.

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In teratology studies in rats and rabbits (method US-EPA 83-3), increased incidences of fetal abnormalities were observed, such as a.o. placental abnormalities, fused or incompletely ossified sternebrae, abnormalities of the head bones, not developed renal papillae and distended ureter(s).

STOT – single exposure To our knowledge, no specific effects other than already mentioned have been observed. B.o.a.d.t.c.c.a.n.m.

STOT – repeated exposure Target organ: liver
LOAEL: 500 ppm (41 mg/kg bw/day) in a 90-day rat study. At this dose level decreased body weight and increased liver weight were seen. B.o.a.d.t.c.c.a.n.m.

Sodium alkyl naphthalene sulphonate-formaldehyde condensate

Acute toxicity The substance is not considered harmful by single exposure. B.o.a.d.t.c.c.a.n.m.

Route(s) of entry - ingestion LD₅₀, oral, rat: > 4500 mg/kg
- skin LD₅₀, dermal, rat: not available
- inhalation LC₅₀, 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.

Alcohols, C13-C15, ethoxylated

Acute toxicity The product is not considered as harmful by inhalation, ingestion or skin contact. B.o.a.d.t.c.c.a.n.m. The acute toxicity is measured as:

Route(s) of entry - ingestion LD₅₀, oral, rat: > 2000 mg/kg
- skin LD₅₀, dermal, rat: not available
- inhalation LC₅₀, inhalation, rat: not available

Skin corrosion/irritation The product is irritating to skin (method OECD 404).

Serious eye damage/irritation The product is irritating to eyes (method OECD 405).

1,2-Benzisothiazol-3(2H)-one

Acute toxicity The substance is harmful by ingestion.

Route(s) of entry - ingestion LD₅₀, oral, rat (male): 670 mg/kg
LD₅₀, oral, rat (female): 784 mg/kg
(method OPPTS 870.1100; measured on 73% solution)
- skin LD₅₀, dermal, rat: > 2000 mg/kg (method OPPTS 870.1200
measured on 73% solution)
- inhalation LC₅₀, inhalation, rat: not available

Skin corrosion/irritation Slightly irritating to skin (method OPPTS 870.2500)

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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. B.o.a.d.t.c.c.a.n.m.
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. B.o.a.d.t.c.c.a.n.m.
Reproductive toxicity	The reproduction study did not show evidence of increased susceptibility of offspring. Developmental effects consisted of slightly delayed ossification. B.o.a.d.t.c.c.a.n.m.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. **Toxicity** The product is very toxic to fish and other aquatic organisms. It is not considered as harmful to birds, insect and soil macro- and microorganisms. The ecotoxicity of the product is measured as:
- | | | |
|-----------------|--|---|
| - Fish | Rainbow trout (<i>Oncorhynchus mykiss</i>) | 96-h LC ₅₀ : 0.163 mg/l |
| - Invertebrates | Daphnids (<i>Daphnia magna</i>) | 48-h EC ₅₀ : 0.23 mg/l |
| - Algae | Green algae (<i>Desmodesmus subspicatus</i>) | 96-h IC ₅₀ : 0.039 mg/l |
| - Plants | Duckweed (<i>Lemna gibba</i>) | 7-day 0.57 mg/l |
| - Birds | Japanese quail (<i>Coturnix coturnix japonica</i>) | LD ₅₀ : > 2000 mg/kg |
| - Earthworms | <i>Eisenia foetida</i> | 14-day LC ₅₀ : > 1000 mg/kg dry soil |
| - Bees | Honeybee (<i>Apis mellifera</i>) | 48-h LD ₅₀ , contact: > 100 µg/bee
48-h LD ₅₀ , oral: > 100 µg/bee |
- 12.2. **Persistence and degradability** **Fluazinam** is biodegradable, but it does not meet the criteria for being readily biodegradable. It undergoes degradation in the environment and in waste water treatment plants.
- Primary degradation half-lives for fluazinam vary much with circumstances, but are usually a few months 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.
- Fluazinam** has a small potential to bioaccumulate, but is metabolised relatively rapidly. The bioconcentration factor is measured to 500 - 800 for whole fish (bluegill sunfish, *Lepomis macrochirus*).
- 12.4. **Mobility in soil** **Fluazinam** has low mobility in soil.

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- 12.5. **Results of PBT and vPvB assessment** None of the ingredients meet 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 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. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
- Disposal of waste and packagings must always be in accordance with all applicable local regulations.

SECTION 14: TRANSPORT INFORMATION

- 14.1. **UN number** 3082
- 14.2. **UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (fluazinam)
- 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

- 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.
- Dir. 92/85/EEC: The employer shall assess the degree and duration of exposure at the workplace and any possible effect on pregnant women working with this product, and decide which measures should be taken.

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Young people under the age of 18 are not allowed to work with the product.

All ingredients are covered by EU chemical legislation.

15.2. **Chemical safety assessment** A chemical safety assessment has not been performed.

♣ SECTION 16: OTHER INFORMATION

Relevant changes in the SDS	Only minor changes in layout. No changes concerning hazardous properties.
List of abbreviations	<p>B.o.a.d.t.c.c.a.n.m.: Based on available data, the classification criteria are not met.</p> <p>CAS Chemical Abstracts Service</p> <p>CLP Classification, Labelling and Packaging; refers to EU regulation 1272/2008 as amended</p> <p>Dir. Directive</p> <p>DNEL Derived No Effect Level</p> <p>DPD Dangerous Preparation Directive; refers to Dir. 1999/45/EC as amended</p> <p>DSD Dangerous Substance Directive; refers to Dir. 67/548/EEC as amended</p> <p>EC European Community</p> <p>EC₅₀ 50% Effect Concentration</p> <p>EINECS European Inventory of Existing Commercial Chemical Substances</p> <p>GHS Globally Harmonized classification and labelling System of chemicals, Fourth revised edition 2011</p> <p>IBC International Bulk Chemical code</p> <p>ISO International Organisation for Standardization</p> <p>IUPAC International Union of Pure and Applied Chemistry</p> <p>LC₅₀ 50% Lethal Concentration</p> <p>LD₅₀ 50% Lethal Dose</p> <p>LOAEL Lowest Observed Adverse Effect Level</p> <p>MARPOL Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution</p> <p>N.o.s. Not otherwise specified</p> <p>OECD Organisation for Economic Cooperation and Development</p> <p>OPPTS Office of Prevention, Pesticides and Toxic Substances</p> <p>PBT Persistent, Bioaccumulative, Toxic</p> <p>PE Polyethylene</p> <p>PNEC Predicted No Effect Concentration</p> <p>Reg. Regulation</p> <p>R-phrse Risk phrase</p> <p>SC Suspension Concentrate</p> <p>SDS Safety Data Sheet</p> <p>SP Safety Precaution</p> <p>S-phrse Safety phrase</p> <p>STOT Specific Target Organ Toxicity</p> <p>TWA Time Weighted Average</p> <p>US-EPA Environmental Protection Agency USA</p> <p>vPvB very Persistent, very Bioaccumulative</p> <p>WHO World Health Organisation</p>

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