SAFETY DATA SHEET

TIZCA

Compilation date: 16/01/2014

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: TIZCA

Product code: 5810

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Can be used as a fungicide only.

1.3. Details of the supplier of the safety data sheet

Company name: Headland Agrochemicals
Rectors Lane
Pentre
Flintshire
CH5 2DH
United Kingdom

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

Email: enquiry@headlandgroup.com

1.4. Emergency telephone number

Emergency tel: +44(0)1244 537370
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Sens.: R43; Xn: R63; N: R50/53

Classification under CLP: Skin Sens. 1B: H317; Repr. 2: H361d; Aquatic Chronic 1: H410; -: EUH401

Most important adverse effects: May cause sensitisation by skin contact. Possible risk of harm to the unborn child. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements under CLP:

Hazard statements: H317: May cause an allergic skin reaction.
H361d: Suspected of damaging the unborn child.
H410: Very toxic to aquatic life with long lasting effects.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Signal words: Warning

[cont...]

Hazard pictograms: GHS07: Exclamation mark

GHS08: Health hazard

GHS09: Environmental

Precautionary statements: P261: Avoid breathing vapours.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P308+313: IF exposed or concerned: Get medical advice/attention.

P501: Dispose of contents/container to hazardous or special waste collection point.

Label elements under CHIP:

Hazard symbols: Harmful.

Dangerous for the environment.

Risk phrases: 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.

Safety phrases: S24: Avoid contact with skin.

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.

Precautionary phrases: To avoid risks to man and the environment, comply with the instructions for use.

2.3. Other hazards

PBT: This product is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

FLUAZINAM

EINECS	CAS	CHIP Classification	CLP Classification	Percent

[cont...]

616-712-5	79622-59-6	Xn: R20; Xi: R36/38; Sens.: R43; Xn: R63; N: R50/53	Acute Tox. 4: H332; Eye Irrit. 2: H319; Skin Sens. 1A: H317; Repr. 2: H361d; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	30-50%

SODIUM ALKYLNAPTHALENE SULPHONATE-FORMALDEHYDE CONDENSATE

-	577773-56-9	Xi: R36/38	Skin Irrit. 2: H315; Eye Irrit. 2: H319	1-5%

C13-15 ETHOXYLATED ALCOHOLS

-	157627-86-6	Xn: R22; Xi: R41	Acute Tox. 4: H302; Eye Dam. 1: H318	<1%

1,2-BENZISOTHIAZOLIN-3-ONE

220-120-9	2634-33-5	Xn: R22; Xi: R38; Xi: R41; Sens.: R43; N: R50	Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Dam. 1: H318; Skin Sens. 1: H317; Aquatic Acute 1: H400	<1%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor if irritation develops.

Eye contact: Bathe the eye with running water for 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Consult a doctor if irritation persists or problems with vision occur.

Ingestion: Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water to drink immediately. If vomiting does occur, rinse mouth and drink fluids again. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.

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

Skin contact: The symptoms of an allergic reaction to the product range from a mildly itchy, papular rash to painful, weeping and blistering dermatitis.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. The breathing may become shallow and rapid.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Immediate medical attention is required in case of ingestion. Show this safety data sheet to the doctor in attendance. There is no specific antidote against this substance. Gastric lavage and/or administration of activated charcoal can be considered. After decontamination, treatement should be directed at the control of symptoms and the clinical condition.

[cont...]

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Dry chemical or carbon dioxide for small fires, water spray or foam for large fires. Avoid heavy hose streams. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Essential breakdown products are volatile, malodorous, toxic, irritant and inflammable compounds such as hydrogen fluoride, hydrogen chloride, nitrogen oxides, sulphur dioxide, carbon oxides and various fluorinated and chlorinated organic compounds.

5.3. Advice for fire-fighters

Advice for fire-fighters: 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 run off. Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel. If outside keep bystanders upwind and away from danger point. Turn leaking containers leak-side up to prevent the escape of liquid. In the case of large spills, (10 tons or more) alert the approriate authorities.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Surface water drains within close vicinity of the spill should be covered. Spills on the floor or other impervious surface should be absorbed onto universal binder, Fuller's earth or another absorbant clay. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Rinse the area with water and industrial detergent. Absorb wash liquid onto absorbent and transfer to suitable containers. Wash waters must be prevented from entering surface water drains. Large spills which soak into the ground should be dug up and placed in 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. Refer to section 13 of SDS for suitable method of disposal.

[cont...]

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Material should be handled by mechanical means as much as possible. Ensure there is sufficient ventilation of the area. Clean protective clothing and protective equipment with soap and water after use. Collect all wash water and dispose of as hazardous waste.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Recommended storage temperature: 5 - 30°C. Keep away from direct sunlight. Keep container tightly closed. The storage room should be contructed of incombustible material, closed, dry, ventilated and with impermeable floor. A warning sign reading 'POISON' is recommended. The room should only be used for storage of chemicals, and without access to unauthorised persons or children. Food, drink, feed and seed should not be present. A hand wash station should be available.

7.3. Specific end use(s)

Specific end use(s): This 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

Workplace exposure limits: No data available.

8.1. DNEL/PNEC Values

Hazardous ingredients:

1,2-BENZISOTHIAZOLIN-3-ONE

Type	Exposure	Value	Population	Effect
DNEL	Inhalation (developmental tox)	111	Consumers	Systemic

8.2. Exposure controls

Engineering measures: 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 system non-hazardous before opening.

Respiratory protection: Respiratory protection with universal filter type, including particle filter.

Hand protection: Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber. The breakthrough times of these materials for the product are unknown. Replace gloves frequently and limit work done manually. Before removing gloves, wash with soap and water.

[cont...]

Eye protection: Face-shield. Ensure eye bath is to hand.

Skin protection: Waterproof pants and apron of chemical resistant material or coveralls with PE coating will be sufficient for short time exposure. Coveralls must be discarded after use if contaminated. In cases of prolonged exposure, barrier laminate coveralls may be required.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Light yellow to light red-brown

Odour: Barely perceptible odour

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible

Viscosity: 1400 - 7000 mPa.s (depending on shear rate)

Boiling point/range°C: >100 **Flash point°C:** >103

Relative density: 1.28 at 20°C **pH:** 7.5 - 8.3

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: No data available.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes. See subsection 5.2

[cont...]

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>2000	mg/kg
DERMAL	RAT	LD50	>2000	mg/kg
VAPOURS	RAT	4H LC50	>3.56	mg/l

Hazardous ingredients:

FLUAZINAM

DERMAL	RAT	LD50	>2000	mg/kg
DUST/MIST	RAT	4H LC50	1.68	mg/l
ORAL	RAT	LD50	>2000	mg/kg

SODIUM ALKYLNAPTHALENE SULPHONATE-FORMALDEHYDE CONDENSATE

ORAL	RAT	LD50	>4500	mg/kg

C13-15 ETHOXYLATED ALCOHOLS

ORAL	RAT	LD50	>2000	mg/kg

1,2-BENZISOTHIAZOLIN-3-ONE

ORL	MUS	LD50	1150	mg/kg
ORL	RAT	LD50	1020	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Sensitisation	DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: The symptoms of an allergic reaction to the product range from a mildly itchy, papular rash to painful, weeping and blistering dermatitis.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. The breathing may become shallow and rapid.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

[cont...]

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	0.163	mg/l
DAPHNID (Daphnia magna)	48H EC50	0.23	mg/l
ALGAE (Desmodesmus subspicatus)	96H IC50	0.039	mg/l
JAPANESE QUAIL (Coturnix coturnix japoni	LD50	>2000	mg/kg
EARTHWORM (Eisenia foetida)	14d LC50	>1000	mg/kg dry soil
BEE (Apis mellifera)	48H LD50 contact	>100	µg/bee
BEE (Apis mellifera)	48H LD50 oral	>100	µg/bee

12.2. Persistence and degradability

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 in the environment vary with circumstances, but are usually a few months. The product contains minor amounts of not readily biodegradable ingredients, which may not be degradable in waste water treatment plants.

12.3. Bioaccumulative potential

Bioaccumulative potential: Fluazinam: Log Kow = 3.56; BCF = 500 - 800 (Bluegill sunfish, Lepomis macrochirus). Fluazinam has a small potential to bioaccumulate but is metabolised relatively rapidly.

12.4. Mobility in soil

Mobility: Fluazinam has low mobility in soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. Do not contaminate ponds, waterways or ditches with chemical or used containers.

Disposal of packaging: Triple rinse (or equivalent) and offer for recycling or reconditioning. Alternatively, the packaging can be rinsed and punctured to make it unusable for other purpose, and then be disposed of in a sanitary landfill. Treat the cleaning water following the above method for waste product. Alternatively, packaging can be delivered to a licensed service for disposal of hazardous waste.

[cont...]

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3082

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUAZINAM)

14.3. Transport hazard class(es)

Transport class: 9

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes **Marine pollutant:** Yes

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: 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

Specific regulations: Sevesco 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. Workers under the age of 18 are not permitted to work with the product. All ingredients in this product are covered by EU chemical legislation. Product Registration Number: MAPP 16289.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

[cont...]

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

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.

H332: Harmful if inhaled.

H361d: Suspected of damaging the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

R20: Harmful by inhalation.

R22: Harmful if swallowed.

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.

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

R50: Very toxic to aquatic organisms.

R63: Possible risk of harm to the unborn child.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.