Trade name: TAKUMI SC
Product no.: NI 022 C0060/UK-1
Current version : 3.0.5, issued: 28.06.2023 **Replaced version:** 3.0.4, issued: 22.06.2023 **Region:** GB

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

1.1 Product identifier

Trade name

TAKUMI SC

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

Relevant identified uses of the substance or mixture
Plant protection product
Fungicide

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Certis Belchim B.V. (EU)
Stadsplateau 16
3521 AZ Utrecht - Nederland

Telephone no.	0031 (0)30 200 1200
Fax no.	0031 (0)30 310 0241
e-mail	info@certisbelchim.com

Advice on Safety Data Sheet
www.certisbelchim.com

Identification of the supplier

Address
Certis Belchim B.V. - United Kingdom
Suite 5, 3 Riverside, Granta Park - Great Abington
Cambridgeshire CB21 6AD
United Kingdom

Telephone no.	0044 (0) 1223 652500
Fax no.	0044 (0)1223 891210
e-mail	info.uk@certisbelchim.com - www.certisbelchim.co.uk

1.4 Emergency telephone number

Carechem 24 EU: +44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 2; H411

Classification information
Classification and labelling are based on toxicological studies performed on the product (mixture).
Classification and labelling with respect to water pollution risks are based on ecotoxicological studies performed on the product (mixture).
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS09

Signal word
-

Hazard statement(s)

H411	Toxic to aquatic life with long lasting effects.

Hazard statements (EU)

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 for use.

Precautionary statement(s)

P273	Avoid release to the environment.
P280	Wear protective gloves.
P391	Collect spillage.
P501	Dispose of contents/ container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste.

2.3 Other hazards

PBT assessment
No data available.

vPvB assessment
No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization
Cyflufenamid 100 g/l (SC)

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**Cyflufenamid**			
	180409-60-3 605-896-2 - -	Aquatic Chronic 1; H410	>= 5.00 - < 10.00	wt%
2	**1,2-benzisothiazol-3(2H)-one**		**pls. refer to footnote (1)**	
	2634-33-5 220-120-9 613-088-00-6 -	Acute Tox. 4; H302 Aquatic Acute 1; H400 Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317	< 0.10	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16
(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	-	Skin Sens. 1; H317: C >= 0.05%	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
If medical advice is needed, have product container or label at hand.

After inhalation
Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

After skin contact
Take off contaminated clothing. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

After eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion
Rinse mouth. Call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam; Carbon dioxide; Extinguishing powder; Water spray jet

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO); Hydrogen chloride (HCl); Nitrogen oxides (NOx); Sulphur oxides (SxOy)

5.3 Advice for firefighters
Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. Do not discharge uncontrolled into the subsoil/soil. Notify the authorities if product enters sewers or public waters.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections
Information regarding waste disposal, see section 13. Information regarding personal protective measures, see section 8. Information regarding safe handling, see section 7.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
No special measures necessary if stored and handled as prescribed. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures
Keep away from food, drinks and animal feeding stuffs. Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Do not inhale vapours.

Advice on protection against fire and explosion
No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place. Keep from freezing. Protect from heat and direct sunlight.

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Keep only in the original container.

Incompatible products
Do not store together with food, beverages and animal feeds. Do not store together with: Bases; Acids

7.3 Specific end use(s)

Industry solution
Always read the label and product information before use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls
No data available.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses (EN 166)

Hand protection
In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.
Appropriate Material nitrile rubber

Other
Chemical-resistant work clothes. Rubber boots. (EN 13832-3/EN ISO 20345)

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
liquid

Colour
white

Odour
aromatic

pH value			
Value	6.4		
Reference temperature	25	°C	
Concentration	1	%	
Source	Manufacturer		

Boiling point / boiling range
No data available

Melting point/freezing point				
Value	-10	-	0	°C
Source	Manufacturer			
Comments	This product froze after storage at -10°C for 3 days.			

Decomposition temperature
No data available

Flash point
No data available

Ignition temperature
No data available

Auto-ignition temperature		
Value	382	°C
Source	Manufacturer	

Oxidising properties
not oxidizing

Explosive properties
Product does not present an explosion hazard.

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure		
Value	3.54	*10-5 Pa
Reference temperature	20	°C
Source	Manufacturer	

Relative vapour density
No data available

Relative density
No data available

Density
No data available

Solubility in water			
Value		5.20	x 10-4 g/l
Reference temperature		20	°C
Source	Manufacturer		

Solubility			
Value		18.6	g/l
Reference temperature		20	°C
Reference substance	n-hexane		
Source	Manufacturer		
Value		653	g/l
Reference temperature		20	°C
Reference substance	Methanol		
Source	Manufacturer		

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Cyflufenamid**	**180409-60-3**		**605-896-2**
log Pow			4.7	
Reference temperature			25	°C
with reference to	pH 6,75			
Source	Manufacturer			

Kinematic viscosity			
Value		0.968	m Pa
Reference temperature		40	°C
Type	kinematic		
Source	Manufacturer		

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
The product is stable under normal storage and handling conditions.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
None, if handled according to intended use.

10.5 Incompatible materials
Bases; Acids

10.6 Hazardous decomposition products
Combustion or thermal decomposition may generate toxic vapours. In case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity				
No	**Product Name**			
1	**TAKUMI SC**			
LD50	>		2000	mg/kg

Species	rat
Source	Manufacturer

Acute dermal toxicity			
No	**Product Name**		
1	**TAKUMI SC**		
LD50	>	2000	mg/kg
Species	rabbit		
Source	Manufacturer		

Acute inhalational toxicity			
No	**Product Name**		
1	**TAKUMI SC**		
LC50	>	2.64	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Source	Manufacturer		
Comments	highest checkable concentration		
Evaluation/classification	Based on available data, the classification criteria are not met (maximum achievable concentration, no mortality).		

Skin corrosion/irritation	
No	**Product Name**
1	**TAKUMI SC**
Species	rabbit
Source	Manufacturer
Evaluation	non-irritant

Serious eye damage/irritation	
No	**Product Name**
1	**TAKUMI SC**
Species	rabbit
Source	Manufacturer
Evaluation	non-irritant

Respiratory or skin sensitisation	
No	**Product Name**
1	**TAKUMI SC**
Route of exposure	Skin
Species	guinea pig
Source	Manufacturer
Evaluation	non-sensitizing

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**
Source	Manufacturer		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**
Source	Manufacturer		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**
Source	Manufacturer		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Product Name**		
1	**TAKUMI SC**		
LC50	>	1000	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Source	Manufacturer		

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Product Name**		
1	**TAKUMI SC**		
EC50		950	mg/l
Duration of exposure		48	h
Species	Daphnia		
Source	Manufacturer		

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)			
No	**Product Name**		
1	**TAKUMI SC**		
ErC50	>	200	mg/l
Duration of exposure		72	h
Species	Algae		
Source	Manufacturer		

Toxicity to algae (chronic)			
No	**Product Name**		
1	**TAKUMI SC**		
NOEC		0.596	mg/l
Species	Algae		
Source	Manufacturer		

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**
Source	Manufacturer		
Evaluation	not readily biodegradable		

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**

BCF	528
Species	fish
Source	Manufacturer

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**

log Pow	4.7	
Reference temperature	25	°C
with reference to	pH 6,75	
Source	Manufacturer	

12.4 Mobility in soil

Mobility in soil			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Cyflufenamid**	**180409-60-3**	**605-896-2**

log Koc	3	-	3.3
Source	Manufacturer		

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	9
Classification code	M6
Packing group	III
Hazard identification no.	90
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	Cyflufenamid
Tunnel restriction code	-
Label	9

Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	Cyflufenamid
EmS	F-A, S-F
Label	9
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Technical name	Cyflufenamid
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.4 Other information
No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				No 3
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**1,2-benzisothiazol-3(2H)-one**	**2634-33-5**	**220-120-9**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E2

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Creation of the safety data sheet
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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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