

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE**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**

For further advice for medical professionals:

Dublin – National Poisons Information Centre, Beaumont Hospital, Dublin 9:

Available from 8 am to 10pm – 7 days: +353 (01) 809 2166

Available 24hrs: +353(01)809 2566

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**

-

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE**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	<b>Cyflufenamid</b>			
	180409-60-3 605-896-2 - -	Aquatic Chronic 1; H410	>= 5,00 - < 10,00	wt%
2	<b>1,2-benzisothiazol-3(2H)-one</b>		<b>pls. refer to footnote (1)</b>	
	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	< 0,05	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.

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE**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 (CO<sub>2</sub>); Carbon monoxide (CO); Hydrogen chloride (HCl); Nitrogen oxides (NO<sub>x</sub>); Sulphur oxides (S<sub>x</sub>O<sub>y</sub>)**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.

**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**

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE

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**

<b>State of aggregation</b>	
liquid	
<b>Form</b>	
liquid	
<b>Colour</b>	
white	
<b>Odour</b>	
aromatic	
<b>pH value</b>	
Value	6,4
Reference temperature	25 °C
Concentration	1 %
Source	Manufacturer
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point/freezing point</b>	
Value	-10 - 0 °C
Source	Manufacturer
Comments	This product froze after storage at -10°C for 3 days.
<b>Decomposition temperature</b>	
No data available	
<b>Flash point</b>	
No data available	
<b>Ignition temperature</b>	
No data available	
<b>Auto-ignition temperature</b>	
Value	382 °C
Source	Manufacturer
<b>Oxidising properties</b>	
not oxidizing	
<b>Explosive properties</b>	
Product does not present an explosion hazard.	
<b>Flammability</b>	
No data available	
<b>Lower explosion limit</b>	

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE

No data available

**Upper explosion limit**

No data available

**Vapour pressure**

Value	3,54	*10 <sup>-5</sup> 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 <sup>-4</sup> 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	mPa*s
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**

Heat

**10.5 Incompatible materials**

Bases; Acids

**10.6 Hazardous decomposition products**

In case of fire: see section 5.

**SECTION 11: Toxicological information**

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

<b>Acute oral toxicity</b>			
No	Product Name		
1	TAKUMI SC		
LD50	>	2000	mg/kg
Species	rat		
Source	Manufacturer		
<b>Acute dermal toxicity</b>			
No	Product Name		
1	TAKUMI SC		
LD50	>	2000	mg/kg
Species	rabbit		
Source	Manufacturer		
<b>Acute inhalational toxicity</b>			
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).		
<b>Skin corrosion/irritation</b>			
No	Product Name		
1	TAKUMI SC		
Species	rabbit		
Source	Manufacturer		
Evaluation	non-irritant		
<b>Serious eye damage/irritation</b>			
No	Product Name		
1	TAKUMI SC		
Species	rabbit		
Source	Manufacturer		
Evaluation	non-irritant		
<b>Respiratory or skin sensitisation</b>			
No	Product Name		
1	TAKUMI SC		
Route of exposure	Skin		
Species	guinea pig		
Source	Manufacturer		
Evaluation	non-sensitizing		
<b>Germ cell mutagenicity</b>			
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.		
<b>Reproduction toxicity</b>			
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.		
<b>Carcinogenicity</b>			
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.		
<b>STOT - single exposure</b>			
No data available			
<b>STOT - repeated exposure</b>			
No data available			

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE**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

**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE

with reference to Source	pH 6,75 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 K <sub>oc</sub> Source	3 Manufacturer	-	3,3

**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
	1,2-benzisothiazol-3(2H)-one
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**



**Trade name:** TAKUMI SC**Product no.:** NI 022 C0060 IRE**Current version :** 3.0.3, issued: 28.06.2023**Replaced version:** 3.0.2, issued: 06.06.2023**Region:** IE

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**

UMCO GmbH

Georg-Wilhelm-Str. 187, D-21107 Hamburg

Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

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.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.

Prod-ID 759415