

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name. : TAKUMI SC
Composition code : NI 022 C0060
Active ingredient : Cyflufenamid

1.2. Relevant identified uses of the substance or mixture and uses advised against**2.1. Relevant identified uses**

Main use category : Plant protection product for professional use. Agriculture.
Use of the substance/mixture : Fungicide.

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheetSupplier:

NIPPON SODA Co., Ltd.
Berliner Allee 42
40212 Düsseldorf
Germany
T. : +49-(0)211-130 66 86 0
sds@nisso-chem.de

Distributor:

CERTIS UK
1 Riverside
Granta Park
Great Abington
Cambridgeshire CB21 6AD
United Kingdom
Tel: +44 (0)845 373 0305
Fax: +44 (0)1223 891210
Email: certis@certiseurope.co.uk
Website: www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.
For advice on medical emergencies, fires, spillages or chemical hazards only –phone: 0870 190 6777.
For further advice for medical professionals - The National Poisons Information Service:
Tel: 0870 600 6266 (UK only) or Dublin Tel: 0035 3 137 99 64/379966.
For further advice for veterinary surgeons: 020 7635 9195.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aquatic Chronic 2 H411


Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

N; R50/53

Full text of R-phrases: see section 16.

2.2. Label elements

Type	Code	Phrase	Hazard symbols
CHIP	N	Dangerous for the environment	 N - Dangerous for the environment
CHIP	R50	Very toxic to aquatic organisms	
CHIP	R53	May cause long-term adverse effects in the aquatic environment	
CHIP	S35	This material and its container must be disposed of in a safe way	
CHIP	S37	Use appropriate containment to avoid environmental contamination	

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

Hazard pictograms (CLP)



GHS09

Signal word (CLP)

: Warning.

Hazard statements (CLP)

: H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

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

EUH phrases

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

2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Cyflufenamid	(CAS No.) 180409-60-3 (EC no) - (EC index no) -	10 - 25	N; R51/53
Propylene glycol	(CAS No.) 57-55-6	5	Not classified.
Others	-	5	Not classified.
Water	-	80	Not classified.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cyflufenamid	(CAS No.) 180409-60-3 (EC no) - (EC index no) -	10 - 25	Aquatic Chronic 2, H411
Propylene glycol	(CAS No.) 57-55-6	5	Not classified.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Others	-	5	Not classified.
Water	-	80	Not classified.

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : In the event of any complaints or symptoms, avoid further exposure.
- First-aid measures after inhalation : IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist call a doctor.
- First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes.
If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person.

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

No additional information 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 : Water spray
Dry chemical powder
Alcohol resistant foam
Carbon dioxide (CO₂).
- Unsuitable extinguishing media : Jet of water.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire.
Fight fire from safe distance and protected location.
Do not breathe fumes
Cool closed containers exposed to fire with water spray
If possible, take the containers out of dangerous zone.
Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.
- Protection during firefighting : Wear suitable protective clothing, gloves, eye/face protection and respiratory protection
Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.
- Emergency procedures : Evacuate area.
- Ensure adequate ventilation.
- Avoid direct contact with the substance.
- Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.2. Environmental precautions

- Prevent entry to sewers and public waters.
- Notify the authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.
- Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly.
- Remove as chemical waste, according to national or local legislation.
- In the event of major spillage: contact an expert.

6.4. Reference to other sections

- No additional information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Read label before use.
- Avoid contact with eyes, skin, nose and mouth.
- Wear suitable protective clothing, gloves and eye/face protection.
- Opened containers must be carefully closed and kept upright to avoid leakage.
- Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.
- Contaminated work clothing should not be allowed out of the workplace.
- Do no eat, drink or smoke when using this product.
- Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Provide adequate ventilation.
- Storage conditions : Prevent unauthorised access.
- Keep locked up and out of the reach of children.
- Keep in original containers, tightly closed.
- Keep away from food, drink and animal feedingstuffs.
- Protect against frost.
- Keep away from heat and direct sunlight.

7.3. Specific end use(s)

- Fungicide for agricultural use. Refer to the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Protective clothing. Protective goggles. Gloves. Dust/aerosol mask.



Hand protection : Wear impervious gloves resistant to chemical. Nitrile rubber.

Eye protection : Safety goggles or a face shield.

Skin and body protection : Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.

Respiratory protection : Wear appropriate respirator for dust / organic vapors.

Hygiene measures : Do not eat, drink or smoke while handling the product.
 Clean gloves with soap and water before removing.
 Wash hands and face with soap and water before eating, drinking or smoking.

Clean equipment, premises and work clothes regularly.

Work clothing should remain on the work area and stored separately from street clothes.

Environmental exposure controls : Discharge into the environment must be avoided.

Do not contaminate surface and groundwater.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: White.
Odour	: Mildly aromatic.
Odour threshold	: No data available.
pH	: 7
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: No data available.
Self ignition temperature	: 382 °C
Decomposition temperature	: No data available.
Flammability (solid, gas)	: No data available.
Vapour pressure	: 3.54 x 10 ⁻⁵ Pa at 20°C (Active ingredient)
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available
Solubility	: Water: 5.20 x 10 ⁻⁴ at 20°C, pH 6.5
Log Pow	: 4.7 at 25°C, pH6.75 (Active ingredient)
Log Kow	: 1003 - 2100
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.

Explosive limits : No data available.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

Is not explosive and does not exhibit oxidant properties.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

TAKUMI SC	
LD ₅₀ oral rat	> 2000 mg/kg
LD ₅₀ dermal rat	> 2000 mg/kg
LD ₅₀ dermal rabbit	> 2.64 mg/l

Irritation : Not classified.

Dermal (rabbit) : Not irritant.

Eyes (rabbit) : Minimal.

Corrosivity : Not classified.

Sensitisation : Not classified.

Dermal (guinea pig) : Negative.

Respiratory : Not available.

Repeated dose toxicity : Not classified.

Carcinogenicity : Not classified.

Mutagenicity (Active Ingredient) : Not classified.

Ames test : Negative.

Chromosomal aberration test : Negative.

Cytogenetic test (mouse lymphoma) : Negative.

Toxicity for reproduction (Active Ingredient) : Not classified.

STOT-single exposure : Not available.

STOT-repeated exposure : Not available.

Aspiration hazard : Not available.

Others (Active Ingredient)

Tetratogenicity	: Negative (rat). Negative (rabbit).
Subchronic Toxicity	
90-days Repeated Dose test (rat)	: NOAEL 20.1 mg/kg/day (male); NOAEL 24.7 mg/kg/day (female).
Chronic Toxicity	
NOAEL (rat- 2 years)	: 4.4 mg/kg/day (male), 5.5 mg/kg/day (female).
NOAEL (mouse -1.5 years)	: 62.8 mg/kg/day (male), 9.0 mg/kg/day (female).

SECTION 12: Ecological information

12.1. Toxicity

TAKUMI SC	
LC ₅₀ Fish	> 854 mg/l (96 h)
EC ₅₀ Daphnia	162 mg/l (48h)
ErC ₅₀ Algae	> 130 mg/l (72h)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

TAKUMI SC	
BCF Fish	528 mg/l (10-28 days as active ingredient)
Log Pow	4.7 at 25°C, pH6.75 (as active ingredient)
Log Kow	1003 - 2100

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available.

14.6.2. Transport by sea

No additional information available.

14.6.3. Air transport

No additional information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

Water Hazard Class (Germany): WGK 1
No REACH Annex XVII restrictions.
Contains no REACH candidate substance.

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No additional information available.

SECTION 16: Other information

Full text of R-, H- and EUH-phrases::

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
H411	Toxic to aquatic life with long lasting effects.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
N	Dangerous for the environment.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.