

Safety data sheet in accordance with Regulation (EC) No 1907/2006

Prepared: March 8, 2005

Version : 18

Revised: June 25, 2020

---

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

## 1.1 Product identifier

**Cyflufenamid 5%EW**

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

Fungicide for agricultural use

## 1.3 Details of the supplier of the safety data sheet

Company Name : Nisso Chemical Europe GmbH

Address : Berliner Allee 42

40212 Düsseldorf

Germany

Telephone Number : +49-(0)211-130 66 86 0

Telefax Number : +49-(0)211-328231

Email: : [sds@nisso-chem.de](mailto:sds@nisso-chem.de)

## 1.4 Emergency Telephone Number: CHEMTREC +1-703-741-5970 (24-hour)

---

2. HAZARDS IDENTIFICATION

## 2.1 Classification of the mixture

## 2.1.1 Classification according to Regulation (EC) No 1272/2008

Aquatic Chronic 2 : H411 Toxic to aquatic life with long lasting effects

## 2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008



Hazard pictogram GHS09

Signal word No signal word

Hazard statement

H411 Toxic to aquatic life with long lasting effects

EUH208 Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

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

Precautionary statement

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/national/international regulations.

SP 1 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).

## 2.3 Other hazards

---

This product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex X III.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

## 3.1 Substance

Not applicable

## 3.2 Mixtures

CAS No.	EC No.	Index No./ REACH Registration No.	Content (wt%)	Substance name	Classification according to Regulation (EC) No 1272/2008(CLP)
180409-60-3	605-896-2	— / —	5.0 (pure)	Cyflufenamid; (Z)-N-[ $\alpha$ -(cyclopropylmethoxyimino)-2,3-difluoro-6-(trifluoromethyl)benzyl]-2-phenylacetamide	Aquatic Chronic 1; H410
—	922-153-0	— / —	18	Hydrocarbons, C10-C13, aromatics, <1% naphthalene	Asp.Tox.1; H304 EUH066 Aquatic Chronic 2; H411
68920-66-1	500-236-9	— /01-2119489 407-26-XXXX	10	Alcohols, C16-18 (even numbered, C18-unsaturated), ethoxylated	Skin Irrit. 2; H315 Aquatic Chronic 2; H411
99734-09-5	not applicable (polymer)	— / —	5	Poly(oxy-1,2-ethanediyl)-alpha-[tris(1-phenylethyl)phenyl]-omega-hydroxy-	Aquatic Chronic 3; H412
90093-37-1	Not applicable (polymer)	— / —	1	Polyoxyethylene tristylphenylether phosphate	Eye Irrit.2; H319
2634-33-5	220-120-9	613-088-00-6 / —	<0.05	1,2-Benzisothiazole-3-(2H)-one	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 Skin Sens.1; H317* Aquatic Acute 1; H400
—	—	—	Balance	Other ingredients	—

\* Specific Conc. Limits and M factors: C  $\geq$  0.05% Skin Sens.1; H317

## 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

4.1.1 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.

4.1.2 Skin Contact: Remove contaminated clothing and shoes, and wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

4.1.3 Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISONCENTER/doctor if you feel unwell

4.1.4 Ingestion: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell.

---

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

Not available

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

No specific antidote. Supportive care. Treatment based on judgment of physician in response to symptoms of patient.

---

### 5. FIRE - FIGHTING MEASURES

#### 5.1 Extinguishing media : Dry chemicals, carbon dioxide, foam or water spray.

Unsuitable extinguishing media : Not known

#### 5.2 Special hazards arising from the substance or mixture

Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide, hydrogen fluoride and nitrogen oxides.

#### 5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus and complete personal protective equipment.

Other information : Move containers away from fire areas if it can be done without risk. If impossible to remove containers from fire zone, cool them with water spray.

---

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precaution, protective equipment and emergency procedures

Wear personal protective equipment. Refer to Section 8 for personal protective equipment.

Keep away from all ignition sources. Avoid contact with skin, eyes and clothing.

Avoid breathing the mist or vapours.

Evacuate area. Ventilate area.

#### 6.2 Environmental precautions

Prevent this product from entering into drains, ditches or rivers because this product is toxic to aquatic life with long lasting effects.

#### 6.3 Methods and material for containment and cleaning up

Sweep up, place in containers and holds for waste disposal. Use inert absorbent (e.g. sand or vermiculite) to complete pick-up if necessary. Use vacuum truck if spill is large.

Wash out spill-site after material pick-up is complete.

Do not discharge to river, sea, lake, waterway or sewer systems directly.

Obey local/national/international regulations for health & safety and environmental protection when the accidental spills are treated.

#### 6.4 Reference to other sections

Section 8 and 13

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wear personal protective equipment. Refer to Section 8 for personal protective equipment.

Keep out of reach of children.

Do not breathe mist or vapours.

Wash hands and face thoroughly after handling.

Avoid contact with skin, eyes and clothing.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Store in a cool, dry and well-ventilated place.

Avoid direct contact with water, acids or bases.

### 7.3 Specific end use

Fungicide for agricultural use

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters Active ingredient : TLV/ACGIH not listed

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Use general and/or local exhaust ventilation to control vapours/mist.

Provide safety showers and eyewashes.

#### 8.2.2 Individual protection measures, such as personal protective equipment

(a) Eye protection : Use safety goggles.

(b) Skin protection : Wear suitable working wear, gloves and boots.

Hand protection : Protective gloves against chemicals and micro-organisms.

Gloves material ; e.g. outside Rubber, Vinyl chloride resin  
inside Cotton, rayon

(c) Respiratory protection: Wear suitable respirator for organic vapours.

(d) Thermal hazards : None

#### 8.2.3 Environmental exposure controls :

Use general and/or local exhaust ventilation to control vapours/mist.

Provide safety showers and eyewashes.

Prevent from entering into drains, ditches or rivers.

---

---

9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

Appearance	Whitish emulsion solution with no separation and no floating materials
Odour	Aromatic odor
Odour threshold	Not available
pH	5.0 (original), 5.7 (1% w/v dilution)(CIPAC MT75)
Melting point/freezing point	-10~0°C (This product froze after storage at -10°C for 3 days.)
Initial boiling point and boiling range	103°C
Flash point	112°C (Cleaveland open cup)
Evaporation rate (Butyl Acetate=1)	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability limits or explosive limits	Not available
Vapour pressure	$3.54 \times 10^{-5}$ Pa at 20°C (as active ingredient)
Vapour density (air=1)	Not available
Relative density	1.027 g/L at 20°C (OECD 109)
Solubility in water	Insoluble
Partition coefficient n-Octanol/water	$\log P_{o/w} = 4.70$ at 25°C, pH6.75
Auto-ignition temperature	Self-heating: None below 400°C (EU 92/69/EEC, A.15 (1992)) None below boiling point (103°C) (EU 92/69/EEC, A.9 (1992))
Decomposition temperature	Not available
Viscosity	$3.7 \times 10^{-5}$ m <sup>2</sup> /sec at 40°C (kinematic) (see section 16)
Explosive properties	Not explosive
Oxidising properties	Not oxidising (EU EEC A.21)
9.2 Other information	
Surface tension	31.9 mN/m at 1.0 g a.s./L (20°C) 31.8 mN/m at 2.5 g a.s./L (20°C)(OECD 115)
Particle size distribution	Not applicable

---

10. STABILITY AND REACTIVITY

## 10.1 Reactivity

The specific test data of the reactivity hazards is not available.

## 10.2 Chemical stability

Stable under normal storage and handling conditions.

## 10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

## 10.4 Conditions to avoid

High temperature

## 10.5 Incompatible materials

Strong oxidizing agents, strong acids or bases

## 10.6 Hazardous decomposition products

Carbon oxides, nitrogen oxides, methyl sulfide, sulfur dioxide, and hydrogen chloride.

---

## 11 TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

## (a) acute toxicity

Oral	LD <sub>50</sub> (rat):	> 5000mg/kg
Dermal	LD <sub>50</sub> (rat):	> 2000mg/kg
Inhalation	LC <sub>50</sub> (rat):	> 4.41 mg/L (4hr)(maximum practicable concentration)

## (b) skin corrosion/irritation

Dermal (rabbit): Moderate to severe (Effects are well below threshold for classification.)

## (c) serious eye damage/irritation

Eyes (rabbit): Very slight (Effects are well below threshold for classification.)

## (d) respiratory or skin sensitization

Dermal (guinea pig): Negative

Respiratory: Not available

## (e) germ cell mutagenicity

For the Product: Not available

Active ingredient:

Ames test: Negative

Chromosomal aberration test: Negative

Cytogenetic test (mouse lymphoma): Negative

## (f) carcinogenicity

For the Product: Not available

Active ingredient:

Negative (rat)

Negative (mouse)

## (g) reproductive toxicity

## Reproductive toxicity

For the Product: Not available

Active ingredient:

Negative (rat)

## Teratogenicity

For the Product: Not available

Active ingredient:

Negative (rat)

Negative (rabbit)

## (h) STOT-single exposure: Not available

## (i) STOT-repeated exposure:

## Chronic Toxicity

For the Product: Not available

Active ingredient:

NOAEL (rat): 4.4mg/kg/ay(male), 5.5 mg/kg/day(female) (2 years)

NOAEL (mouse): 62.8mg/kg/ay(male), 9.0 mg/kg/day(female) (1.5 years)

(j)aspiration hazard: Not available

(k)Others: Not available

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Acute Toxicity for Fish (Rainbow trout): LC<sub>50</sub> : 9.84 mg/L (96hr)

Acute Toxicity for Daphnia: EC<sub>50</sub> : 9.48 mg/L (48hr)

Acute Toxicity for Algae: ErC<sub>50</sub> : 1.628 mg/L (72hr)

Chronic Toxicity for Algae: NOEC 0.395 mg/L (72hr)

### 12.2 Persistence and degradability

For the Product: Not available

Active ingredient: Not readily biodegradable.

### 12.3 Bioaccumulative potential

For the Product: Not available

Active ingredient: BCF 528 at 10 µg/L (Mean of 10 -28 days)

### 12.4 Mobility in soil

For the Product: Not available

Active ingredient: Low (Koc=1003~2100)

12.5 Results of PBT and vPvB assessment: This product does not meet the criteria for PBT or vPvB according to Regulation (EC) No1907/2006, Annex X III.

12.6 Other adverse effects : Hazardous to the ozone layer

This product does not contain the subject to the Montreal Protocol.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

- 1) Waste disposal according to 91/689/EEC in the corresponding versions (hazardous waste).
- 2) Consider classifications (European waste catalogue) 02 01 or 07 04.
- 3) Consult the appropriate local authorities about special requirement.
- 4) Dispose of contents/container in accordance with local /national/international regulations.

## 14. TRANSPORT INFORMATION

### 14.1 IMDG

UN No. 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Cyflufenamid mixture)

Hazard Class 9

Packing Group III

Marin pollutant Applicable

### 14.2 RID/ ADR

UN No. 3082

Name and description ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Cyflufenamid mixture)

Class 9

Packing Group III

Hazard Identification No. 90

Environmentally hazardous Applicable

#### 14.3 ICAO/IATA-DGR

UN No. 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Cyflufenamid mixture)

Hazard Class 9

Packing Group III

Environmentally hazardous Applicable

#### 14.4 Special precautions for use

None

---

### 15. REGULATORY INFORMATION

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

EU regulatory information

The product is regulated under the EU Directive(s) or Regulation(s) on plant protection products since it is one of plant protection products.

National regulatory information

Water Hazard Class (Germany): WGK 2

#### 15.2 Chemical safety assessment

Chemical safety assessment for Alcohols, C16-18 (even numbered, C18-unsaturated), ethoxylated was carried out..

---

### 16. OTHER INFORMATION

#### 16.1 Added ,deleted or revised information

16.1.1 This safety data sheet is revised in accordance with Regulation (EC) No 1907/2006.

#### 16.1.2 Added, deleted or revised information

Section 6: The descriptions about accidental release measures were amended or added.

Section 9: Regarding some items the data were added or amended.

Section 7: Minor amendments were done.

Section 12: The description about hazardous to the ozone layer was added.

#### 16.2 List of relevant hazard statements contained in Section 2 to 15 of this document (for information only)

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

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

---



## Remark

Regarding Hydrocarbons, C10-C13, aromatics, <1% naphthalene: Though this product contains 18% of Hydrocarbons, C10-C13, aromatics, <1% naphthalene, the viscosity of this product was more than  $7 \times 10^{-6} \text{ m}^2/\text{s}$ . Therefore H304 according to Regulation (EC) No 1272/2008 does not apply because the kinematic viscosity of the product is higher than  $2 \times 10^{-5} \text{ m}^2/\text{s}$  at 40°C.

---