

# NISSODIUM<sup>®</sup>

CERTIS

**PCS 05514 | Batch No. and manufacturing date: See packaging**

**An emulsion in water formulation containing 50 g/l cyflufenamid  
for the control of powdery mildew on a range of cereal crops.**

## SAFETY PRECAUTIONS

### Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

### Environmental protection

Do not contaminate water with the product or its container.

Do not clean applicator equipment near surface water.

Avoid contamination via drains from farmyards and roads.

### Storage and disposal

RINSE CONTAINER THOROUGHLY by using an integrated pressure device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely. DO NOT RE-USE EMPTY CONTAINER for any purpose.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF THE REACH OF CHILDREN.

**CONDITIONS OF SUPPLY:** The Seller warrants that the goods shall at the time of delivery to the Buyer conform to the Seller's standard specification but all other conditions and warranties, whether express or implied by statute or custom of the trade or otherwise and whether as to condition, quality, performance, merchantability, fitness for any purpose or otherwise, are expressly excluded and, subject as aforesaid, the Seller shall be under no liability whatsoever, in contract or in tort, for or in respect of any loss or damage whatsoever resulting from or arising out of the goods or otherwise. The Seller shall be under no liability in respect of the warranty given above unless the Buyer allows the Seller reasonable opportunity of inspecting the goods where practicable. A consumers statutory rights are not affected.

## RISK AND SAFETY INFORMATION

### NISSODIUM

An emulsion in water formulation containing 50 g/l cyflufenamid.

### WARNING

**TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.**

Avoid release to the environment.

Wear protective gloves.

Collect spillage.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed, empty containers which can be disposed of as non-hazardous waste.

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

**PCS 05514**



## IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

**Crops:** Barley, Durum wheat, oats, rye (winter), triticale and wheat.

**Maximum individual dose:** 0.5 L product per hectare

**Maximum number of applications:** 2 per crop

**Latest time of application:** Before the start of flowering (GS 60)

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

**DIRECTIONS FOR USE:** Refer to leaflet attached to this bottle.

**READ CAREFULLY BEFORE OPENING THE BOTTLE.**

Marketed by: Certis, Suite 5, 3 Riverside, Granta Park, Great Abington, Cambridgeshire, CB21 6AD

Tel: 0044 (0)845 373 0305 Fax: 0044 (0)1223 891210 E-mail: certis@certiseurope.co.uk

For technical and non-emergency calls – phone 0044 (0)1223 894261

For advice on medical emergencies, fires, spillages or chemical hazards ONLY – phone 0870 190 6777

Approval Holder: Nisso Chemical Europe GmbH, Berliner Allee 42, 40212 Dusseldorf, Germany

© NISSODIUM is a registered trademark of Nippon Soda Co., Ltd.

**PROTECT FROM FROST**

**1 LITRE e**

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

Suitable extinguishing media	Water spray Dry chemical powder Alcohol resistant foam Carbon dioxide (CO <sub>2</sub> )
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

Reference to other sections (8, 13).

## 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 not 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

##### Hand protection

Wear impervious gloves resistant to chemical. Gloves material; e.g. outside Rubber, Vinyl chloride resin; inside: cotton, rayon.

##### 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 vapours.

## 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	Off-white to pale yellow
Odour	Aromatic
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	103°C
Flash point	112°C (Cleaveland open cup)
Self ignition temperature	No data available
Decomposition temperature	>140°C (Cyflufenamid)
Flammability (solid, gas)	No data available
Vapour pressure at 20°C	3,54 × 10 <sup>-5</sup> Pa (Cyflufenamid)
Relative vapour density	No data available
Relative density	1,027 (20°C)
Solubility	Insoluble
Partition Coefficient n-Octanol/H <sub>2</sub> O	Log Pow = 4,7 (25°C, pH6.75)
Log Kow	No data available
Viscosity, kinematic	3,7 x 10 <sup>-5</sup> m <sup>2</sup> /sec (40°C)
Viscosity, dynamic	No data available
Explosive properties	Not explosive
Oxidising properties	No oxidising properties
Explosive limits	No data available

Mutagenicity	Ames test: Negative. (Cyflufenamid) Chromosomal aberration test: Negative. (Cyflufenamid) Cytogenetic test (mouse lymphoma): Negative (Cyflufenamid)
Toxicity for reproduction	Negative (Cyflufenamid)
Teratogenicity	Negative in rats and rabbits (Cyflufenamid).
Chronic Toxicity	Cyflufenamid NOAEL (rat, 2 years) 4,4 mg/kg/day (male), 5,5 mg/kg/day (female) NOAEL (mice, 1,5 years) 62,8 mg/kg/day (male), 9,0 mg/kg/day (female)
Subchronic Toxicity	Cyflufenamid NOAEL (rat, 90 days, repeated dose) : 20,1 mg/kg/day (male), 24,7 mg/kg/day (female)

Surface tension	31,9 mN/m (25°C)
-----------------	------------------

### 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

High temperature.

#### 10.5. Incompatible materials

Strong oxidising agents, strong acids or bases.

## 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

<b>CYFLUFENAMID 5% EW</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat	> 4.41 mg/l/4h

Skin Irritation	Moderate to severe irritation in rabbits.
Eye Irritation	Very slight irritation in rabbits.
Sensitisation	Not a skin sensitiser in guinea pigs.
Carcinogenicity	Not carcinogenic in rats and mice (Cyflufenamid)

Mutagenicity	Ames test: Negative. (Cyflufenamid) Chromosomal aberration test: Negative. (Cyflufenamid) Cytogenetic test (mouse lymphoma): Negative (Cyflufenamid)
--------------	--

Toxicity for reproduction	Negative (Cyflufenamid)
Teratogenicity	Negative in rats and rabbits (Cyflufenamid).
Chronic Toxicity	Cyflufenamid NOAEL (rat, 2 years) 4,4 mg/kg/day (male), 5,5 mg/kg/day (female) NOAEL (mice, 1,5 years) 62,8 mg/kg/day (male), 9,0 mg/kg/day (female)

Subchronic Toxicity	Cyflufenamid NOAEL (rat, 90 days, repeated dose) : 20,1 mg/kg/day (male), 24,7 mg/kg/day (female)
---------------------	--

Log Koc	1003 - 2100
---------	-------------

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

<b>CYFLUFENAMID 5% EW</b>	
LC50 Fishes ( <i>Oncorhynchus mykiss</i> )	9.84 mg/l (96 h)
EC50 Daphnia ( <i>Daphnia magna</i> )	9.48 mg/l (48 h)
ErC50 Algae ( <i>Selenastrum capricornutum</i> )	1.628 mg/l (72h)
Chronic Toxicity for Algae (NOEC)	0,395 mg/l (72h)

### 12.2. Persistence and degradability

<b>Cyflufenamid (180409-60-3)</b>	
Persistence and degradability	Not readily biodegradable

### 12.3. Bioaccumulative potential

<b>Cyflufenamid (180409-60-3)</b>	
BCF	BCF = 528 at 10 µg/L (Mean of 10 -28 days)
Log Pow	Log Pow = 4,7 (25°C, pH 6.75)

### 12.4. Mobility in soil

<b>Cyflufenamid</b>	
Log Koc	1003 - 2100

### 12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

### 12.6. Other adverse effects

No additional information available.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste treatment methods

Apply triple washing procedure of the empty container and place the rinse water in the tank or container where the mixture is prepared.  
Handle empty containers and waste as established by the competent authorities.

## SECTION 14: TRANSPORT INFORMATION

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

### 14.1. UN number

UN-No. 3082

### 14.2. UN proper shipping name

#### Proper Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

("Cyflufenamid"/"Solvent naphtha (petroleum), heavy arom." mixture)

#### Transport document description

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)

### 14.3. Transport hazard class(es)

Class (UN)

Hazard labels (UN)



### 14.4. Packing group

Packing group (UN)

### 14.5. Environmental hazards

Dangerous for the environment.

#### Other information

No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.)

Classification code (UN)

Orange plates

90
M6
<b>90</b>
<b>3082</b>

Special provision (ADR)  
Transport category (ADR)  
Tunnel restriction code  
Limited quantities (ADR)  
Excepted quantities (ADR)  
EAC code

### 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

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

Change date	Previous Version	Section	Changed Item	Change	Comments
04/02/2014	1.1	2	CLP classification and label elements	Added	
			R51/53	Removed	
			R50/53	Added	
31/10/2014	3.0	3.2, 9.0, 12			Update according to Version 10 of NISSO (05/06/2014)

Full text of H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Corr. 1B	skin corrosion/irritation Category 1B
Skin Irrit. 2	skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitisation Category 1
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
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
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

# NISSODIUM®

PCS 05514 | Batch No. and manufacturing date: See packaging

An emulsion in water formulation containing 50 g/l cyflufenamid for the control of powdery mildew on a range of cereal crops.

## SAFETY PRECAUTIONS

### Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:  
WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate.  
WHEN USING DO NOT EAT, DRINK OR SMOKE.

### Environmental protection

Do not contaminate water with the product or its container.  
Do not clean applicator equipment near surface water.  
Avoid contamination via drains from farmyards and roads.

### Storage and disposal

RINSE CONTAINER THOROUGHLY by using an integrated pressure device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.  
DO NOT RE-USE EMPTY CONTAINER for any purpose.  
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.  
KEEP OUT OF THE REACH OF CHILDREN.

**CONDITIONS OF SUPPLY:** The Seller warrants that the goods shall at the time of delivery to the Buyer conform to the Seller's standard specification but all other conditions and warranties, whether express or implied by statute or custom of the trade or otherwise and whether as to condition, quality, performance, merchantability, fitness for any purpose or otherwise, are expressly excluded and, subject as aforesaid, the Seller shall be under no liability whatsoever, in contract or in tort, for or in respect of any loss or damage whatsoever resulting from or arising out of the goods or supply or use thereof, whether caused by the negligence of the Seller or otherwise. The Seller shall be under no liability in respect of the warranty given above unless the Buyer allows the Seller reasonable opportunity of inspecting the goods where practicable. A consumers statutory rights are not affected.

## RISK AND SAFETY INFORMATION

### NISSODIUM

An emulsion in water formulation containing 50 g/l cyflufenamid.

### WARNING

**TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.**

Avoid release to the environment.  
Wear protective gloves.  
Collect spillage.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed, empty containers which can be disposed of as non-hazardous waste.

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

PCS 05514

## IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

**Crops:** Barley, Durum wheat, oats, rye (winter), triticale and wheat.

**Maximum individual dose:** 0.5 L product per hectare

**Maximum number of applications:** 2 per crop

**Latest time of application:** Before the start of flowering (GS 60)

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

**DIRECTIONS FOR USE:** Refer to leaflet attached to this bottle.

**READ CAREFULLY BEFORE OPENING THE BOTTLE.**

Marketed by: Certis, Suite 5, 3 Riverside, Granta Park, Great Abington, Cambridgeshire, CB21 6AD  
Tel: 0044 (0)845 373 0305 Fax: 0044 (0)1223 891210 E-mail: certis@certiseurope.co.uk  
For technical and non-emergency calls – phone 0044 (0)1223 894261

For advice on medical emergencies, fires, spillages or chemical hazards ONLY – phone 0870 190 6777

Approval Holder: Nisso Chemical Europe GmbH, Berliner Allee 42, 40212 Dusseldorf, Germany

© NISSODIUM is a registered trademark of Nippon Soda Co., Ltd.

PROTECT FROM FROST

1 LITRE e

## IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

<b>Crops:</b>	Barley, Durum wheat, oats, rye (winter), triticale and wheat
<b>Maximum individual dose:</b>	0.5 L product per hectare
<b>Maximum number of applications:</b>	2 per crop
<b>Latest time of application:</b>	Before the start of flowering (GS 60)

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

## SAFETY PRECAUTIONS

### Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

### Environmental protection

Do not contaminate water with the product or its container. Do not clean applicator equipment near surface water. Avoid contamination via drains from farmyards and roads.

### Storage and disposal

RINSE CONTAINER THOROUGHLY by using an integrated pressure device or manually rinsing three times.

Add washings to sprayer at time of filling and dispose of safely.

DO NOT RE-USE EMPTY CONTAINER for any purpose.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF THE REACH OF CHILDREN.

## DIRECTIONS FOR USE - READ CAREFULLY BEFORE OPENING THE BOTTLE

IMPORTANT: This information is approved as part of the product label. All instructions within this section must be read carefully in order to obtain safe use and successful use of this product.

NISSODIUM® is a protectant fungicide with useful curative activity against powdery mildew on a range of cereal crops.

### Crop safety and timing

NISSODIUM can be used on all varieties of wheat, barley, oats, rye (winter), Durum wheat, triticale from the beginning of stem elongation (GS 30) and before the start of flowering (GS 60).

### Mixing

Half-fill the spray tank with clean water. Commence agitation. Add the recommended quantity of NISSODIUM to the spray tank. Complete filling and maintain agitation of the solution before and during spraying until the tank is empty.

### Rate, water volume and application

Rate: 0.5 L NISSODIUM per hectare per application.

### Maximum number of applications

A maximum of two applications of NISSODIUM may be applied to any one crop.

**Water Volume:** A water volume of 200-400 litres per hectare is recommended. It is important to ensure that good overall coverage of the plant is achieved. Where the crop is dense, the higher water volume should be used. Where the crop is very open, the lower water volume may be used.

**Spray quality:** FINE or MEDIUM (as defined by the BCPC) using a conventional hydraulic sprayer.

### Time of application

For best results NISSODIUM should be applied at the first visible signs of infection by powdery mildew. For disease control other than Powdery mildew, NISSODIUM should be tank mixed with a broad-spectrum fungicide (see Compatibility section for approved tank mix partners). Where disease pressure remains high or re-infection occurs, a further application of NISSODIUM can be made to the crop.

NISSODIUM should be applied in the spring only.

### Latest time of application

Before the start of flowering (GS 60).

### Compatibility

NISSODIUM can be tank mixed with a number of fungicide products to broaden the disease spectrum. The other product labels should be checked thoroughly prior to use to ensure that the crops, timing and any other restrictions on them are appropriate for use with NISSODIUM. Tank mixes should not be allowed to stand in the tank and agitation must be maintained at all times.

NISSODIUM is compatible in two-way tank mixes with any one of the following products:

approved formulations of prochloraz (Mirage 40EC)

approved formulations of cyproconazole

approved formulations of azoxystrobin (Amistar)

approved formulations of fenpropimorph (Corbel)

approved formulations of tebuconazole (Folicur)

approved formulations of epoxiconazole (Opus)

The crop safety of the listed tank mixes has only been established on winter wheat and winter barley. On winter wheat some transient chlorosis/necrosis has been recorded which has not affected final yield.

### Resistance management

The mode of action of cyflufenamid is different to that of fungicides from other groups. There are no known cases of cross resistance to cyflufenamid in pathogens that have developed reduced sensitivity to other fungicides.

Disease control may be reduced if strains of pathogens less sensitive to cyflufenamid develop. Guidelines issued by FRAC may help to reduce the onset of resistant strains:

- Apply NISSODIUM at the start of foliar disease attack.
- NISSODIUM must be used as part of an Integrated Crop Management programme that includes use in alternation or tank mixture with fungicides with different modes of action effective against powdery mildew AS WELL AS non-chemical methods of disease management.
- Do not apply consecutive applications of products containing cyflufenamid.
- Apply according to manufacturers recommendations at the specific crop growth stage indicated.
- Apply a maximum of 2 sprays per cereal crop.

### Rainfastness

NISSODIUM is rainfast within one hour.

### Restrictions

Do not apply NISSODIUM to crops under stress from drought, waterlogging, cold, pests or diseases, nutrient or lime deficiency or other factors reducing plant growth.

### Succeeding and replacement crops

There are no restrictions on the planting of any succeeding or rotational crop following the application of NISSODIUM.

### Spray tank clean-out

Immediately after spraying NISSODIUM, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with water and a commercially available cleaning agent (e.g. All Clear Extra).

Rinse inside of tank with clean water and cleaning agent and flush through boom and hoses using at least one tenth of the spray tank volume. Drain completely. Repeat rinsing as above. Do not contaminate surface waters or ditches with rinse water or empty containers.

### Warning

Avoid spray drift onto ponds, waterways and ditches.

All Clear is a registered trademark of E.I.Du Pont de Nemours and Co Inc.

Mirage is a registered trademark of Adama

Folicur is a registered trademark of Bayer

Amistar and Corbel are registered trademarks of Syngenta

Opus is a registered trademark of BASF

This Safety Data Sheet does not form part of the label authorised under Regulation 1107/2009.

## SAFETY DATA SHEET

Date of issue 06/01/2016 Revision date 06/01/2016 Version 3.3

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name	Cyflamid
Product form	Mixture
Type of formulation	Emulsion, oil in water (EW)
Active Ingredient	Cyflufenamid
Composition code	NI 022 C0058

#### 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. Fungicide
-------------------	---

#### Use of the substance/mixture

#### 1.2.2. Uses advised against

No additional information available.

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

##### Supplier:

Nisso Chemical Europe GmbH, Berliner Allee 42,  
40212 Düsseldorf, Allemagne  
T: +49(0) 211 130 66 86 0  
F: +49(0) 211 328231  
sds@nisso-chem.de

##### Distributor:

Suite 5, 3 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

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.

### 2.2. Label elements

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.

P280 - Wear protective gloves.

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 Regulation (EC) No. 1272/2008 [CLP]
Cyflufenamid	(CAS No) 180409-60-3 (EC no) - (EC index no) -	5,3	Aquatic Chronic 1, H410
Hydrocarbons, C10-C13, aromatics, <1% naphthalene	(CAS No) - (EC no) 922-153-0 (EC index no) -	18	Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
Sorbitane trioleate (Anhydro-D-glucitol trioleate)	(CAS No) 26266-58-0 (EC no) 247-569-3 (EC index no) -	10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Polyoxyethylene oleylether (CAS No) 9004-98-2	(CAS No) 9004-98-2 (EC no) 500-016-2 (EC index no) -	10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Poly(oxy-1,2-ethanediyl), a-[2,4,6-tris(1-phenylethyl)phenyl]-w-hydroxy	(CAS No) 99734-09-5	5	Aquatic Chronic 3, H412
Polyoxyethylene tristyllylphenylether phosphate	(CAS No) 90093-37-1	< 5	Eye Irrit. 2, H319
1,2-Benzisothiazole-3-(2H)-one	(CAS No) 2634-33-5 (EC no) 220-120-9 (EC index no) 613-088-00-6	0,2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 (2) Aquatic Acute 1, H400

Full text of 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

Symptoms/injuries No data available.

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

Treat symptomatically.