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

#### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Rhino DS</td>
</tr>
<tr>
<td>Product code</td>
<td>CE 015 C0074</td>
</tr>
<tr>
<td>Type of formulation</td>
<td>Dustable powder (DP)</td>
</tr>
<tr>
<td>Active Ingredient</td>
<td>Flutolanil</td>
</tr>
</tbody>
</table>

#### 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 (Seed treatment) |

##### 1.2.2. Uses advised against

No additional information available.

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

CERTIS UK  
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

| Emergency number | Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777. For further advice for medical professionals: The National Poisons Information Service: +44 (0) 870 600 6266. For further advice for veterinary surgeons: +44 (0) 20 7635 9195  
Dublin - National Poisons Information Centre, Beaumont Hospital, Dublin 9: Available from 8 am to 10 pm - 7 days: +353 (01) 809 2166 Available 24hrs: +353 (01) 809 2566 |

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

| Eye Irrit. 2 | H319 |
| Aquatic Chronic 3 | H412 |

Full text of H-phrases: see section 16.
2.2. Label elements

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

Hazard pictograms (CLP): ![Hazard Symbol](image)

Signal word (CLP): Warning

Hazard statements (CLP):
- H319 - Causes serious eye irritation.
- H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP):
- P264 - Wash hands thoroughly after handling.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P391 - Collect spillage.
- P501 - Dispose of contents/container to a suitable disposal site in accordance with local and national regulations.

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. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flutolanil</td>
<td>(CAS No) 66332-96-5</td>
<td>5 - 10</td>
<td>Aquatic Chronic 2, H411</td>
</tr>
</tbody>
</table>

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

Irritating to eyes.

Mild irritant to skin.

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Unsuitable extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water spray</td>
<td>Jet of water.</td>
</tr>
<tr>
<td>Dry chemical powder</td>
<td></td>
</tr>
<tr>
<td>Alcohol resistant foam</td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide (CO₂)</td>
<td></td>
</tr>
</tbody>
</table>

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

Fire hazard: Combustion or thermal decomposition may generate toxic vapours.

### 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

<table>
<thead>
<tr>
<th>Protective equipment</th>
<th>Emergency procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear suitable protective clothing, gloves and eye or face protection.</td>
<td>Evacuate area.</td>
</tr>
<tr>
<td>Ensure adequate ventilation.</td>
<td>Avoid direct contact with the substance.</td>
</tr>
<tr>
<td>Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.</td>
<td></td>
</tr>
</tbody>
</table>
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

See sections 7-8-13.

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 no eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

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


#### 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. 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**: Solid
- **Appearance**: Powder.
- **Colour**: Pale green.
- **Odour**: Odourless.
- **pH**: 8.97
- **pH solution**: 1 %
- **Melting point**: 104–107°C (Flutolanil)
- **Freezing point**: Not applicable.
- **Boiling point**: Not applicable.
- **Flash point**: Not applicable.
- **Self ignition temperature**: > 140 °C
- **Flammability (solid, gas)**: It has no flammable properties.
- **Vapour pressure**: $4.1 \times 10^{-7}$ Pa (20°C) (Flutolanil)
- **Relative vapour density at 20 °C**: Not applicable.
- **Relative density**: No data available
- **Density**: 0.5573 g/ml
- **Solubility (Flutolanil)**: 8.01mg / L in water (20°C)
  - 606g / L in acetone (20°C)
  - 322g / L in methanol (20°C)
  - 0.395g / L in hexane (20°C)
- **Log Pow**: 3.17 (Flutolanil)
- **Viscosity, kinematic**: Not applicable.
- **Viscosity, dynamic**: Not applicable.
- **Explosive properties**: Product is not explosive.
- **Oxidising properties**: No oxidising properties.

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rat</th>
<th>LC50 inhalation rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhino DS</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 5,13 mg/l/4h</td>
</tr>
</tbody>
</table>

Irritation: Irritating to eyes.
Corrosivity: Not classified
Sensitisation: Not classified
Repeated dose toxicity: Not classified
Carcinogenicity: Not classified
Mutagenicity: Not classified
Toxicity for reproduction: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Flutolanil (66332-96-5)

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 Fishes (carp)</th>
<th>LC50 (bluegill sunfish)</th>
<th>EC50 Daphnia</th>
<th>ErC50 Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flutolanil</td>
<td>3,21 mg/l</td>
<td>&gt; 5,4 mg/l</td>
<td>&gt; 6,8 mg/l</td>
<td>&gt; 3,2 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Flutolanil (66332-96-5)

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrolysis</td>
<td>Stable to hydrolysis</td>
</tr>
<tr>
<td>Photolysis</td>
<td>Half life 277 days in buffer solution (pH7, Xenon arc lamp)</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

Flutolanil (66332-96-5)

| BCFk                       | 100                                              |

12.4. Mobility in soil
No additional information available.

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: Dispose in a safe manner in accordance with local/national regulations.

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
Not applicable

14.6. Special precautions for user

14.6.1. Overland transport
Not applicable

14.6.2. Transport by sea
Not applicable

14.6.3. Air transport
Not applicable

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

Full text of H- and EUH-statements:

|Aquatic Chronic 2| Hazardous to the aquatic environment — Chronic Hazard, Category 2
|Aquatic Chronic 3| Hazardous to the aquatic environment — Chronic Hazard, Category 3
|Eye Irrit. 2| Serious eye damage/eye irritation, Category 2
|H319| Causes serious eye irritation
<table>
<thead>
<tr>
<th>H411</th>
<th>Toxic to aquatic life with long lasting effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>