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

1.1. Product identifier
Product form : Mixture
Product name. : Rhino
Product code : NO 015 C0075
Type of formulation : Suspension concentrate (SC)
Active Ingredient : Flutolanil

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
Supplier:
Nihon Nohyaku Co., Ltd.
Eitaro Bldg., 2-5,
Nihonbashi 1-Chome,
Chuo-Ku, Tokyo, JAPAN

Distributor:
CERTIS UK
Suite 5, 3 Riverside
Granta Park
Great Abingdon
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]

Skin Sens. 1  H317
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):

Hazard statements (CLP):

- H317 - May cause an allergic skin reaction.
- H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP):

- P261 - Avoid breathing mist/spray.
- P273 - Avoid release to the environment.
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
- P363 - Wash contaminated clothing before reuse.
- 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. 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>25 - 50</td>
<td>Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td></td>
<td>[EC no] -</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[EC index no] -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethoxylated polyarylphenol</td>
<td>(CAS No) 99734-09-5</td>
<td>&lt; 1.5</td>
<td>Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>Alcohols, C12-14 secondary,ethoxylated</td>
<td>(CAS No) 84133-50-6</td>
<td>&lt;= 1</td>
<td>Acute Tox. 4 (Dermal), H312</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

Full text of H- and EUH-phrases: see section 16.
### SECTION 4: First aid measures

<table>
<thead>
<tr>
<th>4.1. Description of first aid measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-aid measures general</strong></td>
</tr>
<tr>
<td>In the event of any complaints or symptoms, avoid further exposure.</td>
</tr>
</tbody>
</table>

| **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 information available. |

| 4.3. Indication of any immediate medical attention and special treatment needed |
| Treat symptomatically. |

### SECTION 5: Firefighting measures

<table>
<thead>
<tr>
<th>5.1. Extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Suitable extinguishing media</strong></td>
</tr>
<tr>
<td>Water spray</td>
</tr>
<tr>
<td>Dry chemical powder</td>
</tr>
<tr>
<td>Alcohol resistant foam</td>
</tr>
<tr>
<td>Carbon dioxide (CO2).</td>
</tr>
</tbody>
</table>

| **Unsuitable extinguishing media** |
| Jet of water. |

| 5.2. Special hazards arising from the substance or mixture |
| Combustion or thermal decomposition may generate toxic vapours. |

| 5.3. Advice for firefighters |
| 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.
Wear suitable protective clothing (coveralls) and suitable protective gloves when handling the concentrate, contaminated surfaces or freshly treated material.
Wear suitable protective clothing (coveralls) and suitable protective gloves when applying the product.
This product must only be applied by conventional canopied, hydraulic or spinning disc equipment (with or without electrostatics) mounted on a rolling conveyor or table.
Avoid contact with eyes, skin, nose and mouth.
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.

Maximum storage period: 3 years.

7.3. Specific end use(s)
Fungicide for agricultural use. Refer to the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Flutolanil: 10 mg/m³ (Japan Society for Occupational Health)
2 mg/m³ (Nihon Nohyaku exposure limit)

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: Liquid.
Colour: Pink.
\[ \text{pH} \] : 7
\[ \text{pH solution} \] : 1 %
Self ignition temperature: 485 °C
Relative density: 1.13 g/cm³ (20°C)
Viscosity, dynamic: 109 - 195 mPa.s 20.1±0.5°C
Explosive properties: No explosive properties.
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
Excessive heat.

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>Rhino</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 4000 mg/kg</td>
</tr>
</tbody>
</table>

Skin Irritation : No oedema or erythema reported.
Eye Irritation : Mild irritant.
Corrosivity : Not classified.
Skin sensitisation : 35% elicitation response.
Repeated dose toxicity : No data available.
Carcinogenicity : No data available.
Mutagenicity : No data available.
Toxicity for reproduction : No data available.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Flutolanil (66332-96-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fishes (carp)</td>
<td>3.21 mg/l</td>
</tr>
<tr>
<td>LC50 (bluegill sunfish)</td>
<td>&gt; 5.4 mg/l</td>
</tr>
<tr>
<td>EC50 Daphnia</td>
<td>&gt; 6.8 mg/l</td>
</tr>
<tr>
<td>ErC50 Algae</td>
<td>&gt; 3.2 mg/l</td>
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</tbody>
</table>

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Flutolanil (66332-96-5)</th>
<th></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>
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</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Flutolanil (66332-96-5)</th>
<th>100</th>
</tr>
</thead>
</table>
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

14.1. UN number
UN-No. : 3082
UN-No.(IATA) : 3082

14.2. UN proper shipping name
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Flutolanil)
Transport document description : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Flutolanil), 9, III, (E)

14.3. Transport hazard class(es)
Class (UN) : 9
Class (IATA) : 9 - Miscellaneous dangerous goods.
Hazard labels (UN) : 9

14.4. Packing group
Packing group (UN) : III

14.5. Environmental hazards
Dangerous for the environment : 
Marine pollutant : 
Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport
Hazard identification number (Kemler No.) : 90
Classification code (UN) : M6
Orange plates : 

14.6.2. Transport by sea
EmS-No. (1) : F-A, S-F
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

<table>
<thead>
<tr>
<th>Change date</th>
<th>Previous Version</th>
<th>Section</th>
<th>Changed Item</th>
<th>Change</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/01/2014</td>
<td>1.0</td>
<td>9</td>
<td>Physical state: solid Colour: white</td>
<td>modified</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin irritation: No oedema or erythema reported. Eye irritation: Mild irritant. Skin sensitisation: 35% elicitation response.</td>
<td>modified</td>
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</tr>
<tr>
<td>26/06/2014</td>
<td></td>
<td></td>
<td>General update</td>
<td></td>
<td>Flutolanil 40SC CRD evaluation document</td>
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<tr>
<td>04/11/2014</td>
<td>2</td>
<td></td>
<td>CLP classification and labelling.</td>
<td></td>
<td>According the UK-CRD evaluation document for the zonal re-registration evaluation.</td>
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<tr>
<td>24/04/2018</td>
<td>2.6</td>
<td>1.3</td>
<td>Emergency number</td>
<td>updated</td>
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</tr>
</tbody>
</table>

Full text of H- and EUH-phrases:

Acute Tox. 4 (Dermal) Acute toxicity (dermal) Category 4
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
H312 Harmful in contact with skin
H319 Causes serious eye irritation
H411 Toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects