### 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>DIFEND EXTRA</td>
</tr>
<tr>
<td>Product code</td>
<td>GM 115_116 C1557</td>
</tr>
<tr>
<td>Type of formulation</td>
<td>Flowable concentrate for seed treatment (FS)</td>
</tr>
<tr>
<td>Active ingredient</td>
<td>Difenoconazole, Fludioxonil.</td>
</tr>
</tbody>
</table>

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

##### 1.2.1. Relevant identified uses

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

##### 1.2.2. Uses advised against

No additional information available

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

**Supplier:**
Globachem NV
Brustem Industriepark - Lichtenberglaan 2019
B-3800 Sint-Truiden

**Distributor:**
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: infocertisuk@certiseurope.com
Website: [www.certiseurope.co.uk](http://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 1  H410

Full text of hazard classes and H-statements: see section 16
2.2. Label elements

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

Hazard pictograms (CLP) : 

Signal word (CLP) : Warning

Hazard statements (CLP) : H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP):
- P102 - Keep out of reach of children.
- P270 - Do not eat, drink or smoke when using this product.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- 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-statements :
- 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. Substance

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>Difenoconazole</td>
<td>(CAS No) 119446-68-3</td>
<td>2,5</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>Fluidioxonil</td>
<td>(CAS No) 131341-86-1</td>
<td>2,5</td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>1,2-benzisothiazolin-3-one solution</td>
<td>(CAS No) 26172-55-4</td>
<td>0,1</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1, H317</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
</tr>
</tbody>
</table>

Full text of H-statements: 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 at least 15 minutes, also under eyelids. 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 information available.

4.3. Indication of any immediate medical attention and special treatment needed
The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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: Water spray jet.

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, streams or groundwater.

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/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, streams or groundwater.

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

See Section 7 for information on handling and storage. See Section 8 for information on PPE. See section 13 on information regarding waste disposal.

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 feedingsuffs.

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.

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:
- Remove and wash contaminated clothing before re-use.
- 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 smoking and immediately after handling product.
- 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Red</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.86</td>
</tr>
<tr>
<td>pH solution</td>
<td>1 %</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt; 400 °C. The product is not flammable.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.04 g/ml</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Non applicable</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 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
Direct sunlight. Sources of ignition.

10.5. Incompatible materials
Strong acids. Strong basis.

10.6. Hazardous decomposition products
Combustion or thermal decomposition may generate toxic vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Not classified</th>
</tr>
</thead>
</table>

**DIFEND EXTRA**

| LD50 oral rat   | > 2000 mg/kg   |
| LD50 dermal rat | > 2000 mg/kg   |

**Difenoconazole (119446-68-3)**

| LD50 oral rat   | 300 – 2000 mg/kg |
| LD50 dermal rat | >2000 mg/kg      |
| LC50 inhalation rat | >3,3 mg/l/4h |

**Fludioxonil (131341-86-1)**

| LD50 oral rat   | >5000 mg/kg |
| LD50 dermal rat | >2000 mg/kg |
| LC50 inhalation rat | >2,6 mg/l/4h |

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

**DIFEND EXTRA**

| LC50 Fishes (Oncorhynchus mykiss) | 1 - 10 mg/l (96h) |
| EC50 Daphnia (Daphnia magna)     | 10 - 100 mg/l (48h) |
### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>DIFEND EXTRA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistance and degradability</td>
<td>May cause long-term adverse effects in the environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difenconazole (119446-68-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistance and degradability</td>
<td>Not readily biodegradable. May cause long-term adverse effects in the environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fludioxonil (131341-86-1)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistance and degradability</td>
<td>May cause long-term adverse effects in the environment.</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>DIFEND EXTRA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difenconazole (119446-68-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioconcentration factor (BCF)</td>
<td>330</td>
</tr>
<tr>
<td>Log Pow</td>
<td>4,36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fludioxonil (131341-86-1)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>4,12</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Difenconazole (119446-68-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility in soil</td>
<td>low</td>
</tr>
<tr>
<td>Log Koc</td>
<td>3,58</td>
</tr>
</tbody>
</table>

### 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

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

14.2. UN proper shipping name

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (difeconazole, fludioxonil)
Transport document description: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (difeconazole, fludioxonil), 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:

Special provision (ADR): 274, 335, 601
Transport category (ADR): 3
Tunnel restriction code: E
Limited quantities (ADR): 5L
Excepted quantities (ADR): E1
EAC code: •3Z

14.6.2. Transport by sea

EmS-No. (1): F-A
EmS-No. (2): 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
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations
Water hazard class (WGK): 3 - strongly hazardous to water

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Source of information: Safety Data Sheet of Globachem NV. Date of issue: 18/08/2016. Version 1.1

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment — Acute Hazard, Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation, Category 1B</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Sensitisation — Skin, Category 1</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>EUH401</td>
<td>To avoid risks to human health and the environment, comply with the instructions for use</td>
</tr>
</tbody>
</table>