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

1.1. Product identifier

Product form: Mixture
Product name: GAVEL
Product code: CE 002 C0030
Active Ingredient: Imazalil
Type of formulation: Soluble concentrate (SL)

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.

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 Dam. 1 H318
Carc. 2 H351
Aquatic Chronic 1 H410

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

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

Hazard pictograms (CLP):
- GHS05
- GHS08
- GHS09

Signal word (CLP): Danger

Hazardous ingredients: Imazalil

Hazard statements (CLP):
- H318 - Causes serious eye damage.
- H351 - Suspected of causing cancer.
- H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP):
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
- P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
- P501 - Dispose of contents/container to a suitable disposal site in accordance with local and national regulations.

SP1 – Do not contaminate water with its product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farm yards and roads)

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>Imazalil</td>
<td>(CAS No) 35554-44-0 (EC no) 252-615-0 (EC index no) 613-042-00-5</td>
<td>5 - 10</td>
<td>Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Carc. 2, H351 Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>Polaryphenyl ether phosphate</td>
<td>(CAS No) 90093-37-1</td>
<td>&lt; 5</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

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF INHALED</td>
<td>If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist call a doctor.</td>
</tr>
</tbody>
</table>

### First-aid measures after skin contact

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF ON SKIN</td>
<td>Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention.</td>
</tr>
</tbody>
</table>

### First-aid measures after eye contact

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF IN EYES</td>
<td>Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.</td>
</tr>
</tbody>
</table>

### First-aid measures after ingestion

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF SWALLOWED</td>
<td>Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person.</td>
</tr>
</tbody>
</table>

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

No additional information available

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

Treat symptomatically.

---

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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

| 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. |

#### 5.3. Advice for firefighters

<table>
<thead>
<tr>
<th>Firefighting instructions</th>
<th>Exercise caution when fighting any chemical fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fight fire from safe distance and protected location.</td>
</tr>
<tr>
<td></td>
<td>Do not breathe fumes.</td>
</tr>
<tr>
<td></td>
<td>Cool closed containers exposed to fire with water spray.</td>
</tr>
<tr>
<td></td>
<td>If possible, take the containers out of dangerous zone.</td>
</tr>
<tr>
<td></td>
<td>Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection during firefighting</th>
<th>Wear suitable protective clothing, gloves, eye/face protection and respiratory protection.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wear a self-contained breathing apparatus.</td>
</tr>
</tbody>
</table>

### 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

Toxic to aquatic life with long lasting effects.
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 sections 7-8-13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling  
Read label before use.
Use only in well-ventilated areas.
Avoid breathing spray.
Avoid contact with eyes, skin, nose and mouth.
Wear suitable protective clothing, gloves and eye or 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.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures  
Provide adequate ventilation.

Storage conditions  
Prevent unauthorised access.
Keep in original containers, tightly closed.
Keep out of reach of children.
Protect against frost.
Keep away from food, drink and animal feeding stuffs.

Maximum storage period  
2 year

7.3. Specific end use(s)

Fungicide.

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 chemical resistant nitrile rubber (EN 374-3)

Eye protection: Safety goggles or a face shield. (EN 166)

Skin and body protection: Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots. (EN 1383-3/EN ISO 20345)

Respiratory protection: Wear appropriate respirator for dust / organic vapors.

Hygiene measures: Do not eat, drink or smoke while handling the product.

Environmental exposure controls: Discharge into the environment must be avoided.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: Viscous.

Colour: Yellowish.

Odour: Solvent-like

pH: 4.24 (1% aqueous solution)

Initial boiling point and boiling range: 101 °C

Flash point: > 101 °C

Auto-ignition temperature: 545 °C

Flammability (solid, gas): Not required for liquid formulation.

Relative density: 1.0740 kg/l (20°C)

Viscosity, kinematic: 2.142 x 10^{-6} m²/s (20 °C)

Viscosity, dynamic: 2.292 mPa.s (20 °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

No additional information available

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>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD_{50} oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD_{50} dermal rabbit</td>
<td>&gt; 2000 mg/kg bw</td>
</tr>
<tr>
<td>LC_{50} inhalation rat</td>
<td>&gt; 5 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified (Non irritant to skin)

Serious eye damage/irritation: Risk of serious damage to eyes.

Respiratory or skin sensitisation: Not classified (Not a skin sensitiser.)

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fishes (Oncorhynchus mykiss)</td>
<td>20.99 mg/l (96 h, static)</td>
</tr>
<tr>
<td>EC50 Daphnia (Daphnia magna)</td>
<td>20.306 mg/l (48h, static)</td>
</tr>
<tr>
<td>ErC50 Algae (Desmodesmus subspicatus)</td>
<td>3.81 mg/l (48 h, nominal)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

In soil laboratory incubations under aerobic conditions in the dark imazalil exhibits moderate to very high persistence.

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>BCF Fish</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imazalil</td>
<td>63.8</td>
<td>3.82</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

Imazalil is immobile to slightly mobile in soil.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods: Handle empty containers and waste as established by the competent authorities.

SECTION 14: Transport information

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

14.1. UN number

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No.</td>
<td>3082</td>
</tr>
<tr>
<td>UN-No.(IATA)</td>
<td>3082</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (imazalil)
## Transport document description

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport document description</td>
<td>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (imazalil), 9, III, (E)</td>
</tr>
</tbody>
</table>

## 14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class (UN)</td>
<td>9</td>
</tr>
<tr>
<td>Class (IATA)</td>
<td>9 - Miscellaneous dangerous goods.</td>
</tr>
<tr>
<td>Hazard labels (UN)</td>
<td>9</td>
</tr>
</tbody>
</table>

## 14.4. Packing group

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group (UN)</td>
<td>III</td>
</tr>
</tbody>
</table>

## 14.5. Environmental hazards

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous for the environment</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant</td>
<td></td>
</tr>
</tbody>
</table>

Other information : No supplementary information available.

## 14.6. Special precautions for user

### 14.6.1. Overland transport

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard identification number (Kemler No.)</td>
<td>90</td>
</tr>
<tr>
<td>Orange plates</td>
<td>90</td>
</tr>
</tbody>
</table>

### 14.6.2. Transport by sea

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EmS-No. (1)</td>
<td>F-A, S-F</td>
</tr>
</tbody>
</table>

### 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

A chemical safety assessment is not required for this product. The mixture is assessed under the provisions of Regulation (EC) 1107/2009.
### SECTION 16: Other information

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>H-Statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral), Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4 (Inhalation)</td>
<td>Acute toxicity (inhal.), Category 4</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 1</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity, Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</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>