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

1.1. Product identifier

Product form: Mixture
Product name: Azatin
Product code: CUSA 046 C1037
Type of formulation: Emulsifiable concentrate (EC)
Active ingredient: Azadirachtin

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: Insecticide.

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 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) :

- GHS07
- GHS09

Signal word (CLP) :
Warning.

Hazard statements (CLP) :
- H319 - Causes serious eye irritation.
- H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :
- P101 - If medical advice is needed, have product container or label at hand.
- P102 - Keep out of reach of children.
- P264 - Wash hands, forearms and face thoroughly after handling.
- 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.
- SP1 - Make sure not contaminate water with the product or its packaging.

EUH-statements :
- EUH208 - Contains Azadirachtin. May produce an allergic reaction.
- 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>1-Hexanol</td>
<td>(CAS No) 111-27-3 (EC no) 203-852-3 (EC index no) 603-059-00-6</td>
<td>30 - 60</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td>Azadirachtin</td>
<td>(CAS No) 11141-17-6 (EC no) 601-089-4 (EC index no) -</td>
<td>10 - 30</td>
<td>Skin Sens. 1B, H317 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 victim 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/physician.

Never give anything by mouth to an unconscious person.

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

<table>
<thead>
<tr>
<th>Symptoms/injuries</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms/injuries after inhalation</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Symptoms/injuries after skin contact</td>
<td>May cause skin irritation. Symptoms may include redness, swelling, dry or cracked skin.</td>
</tr>
<tr>
<td>Symptoms/injuries after eye contact</td>
<td>Causes serious eye irritation. Symptoms may include discomfort or pain, excessive blinking and tear production, redness and swelling of the conjunctiva.</td>
</tr>
<tr>
<td>Symptoms/injuries after ingestion</td>
<td>Can cause a bloated feeling in the stomach.</td>
</tr>
</tbody>
</table>

### 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>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water spray</td>
<td></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>

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water spray jet</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Fire hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustion or thermal decomposition may generate toxic vapours.</td>
<td></td>
</tr>
</tbody>
</table>

#### 5.3. Advice for firefighters

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

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No occupational exposure limit value is known. See section 3 "Information on ingredients".

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

- Physical state: Liquid
- Appearance: Viscous
- Colour: Brown
- Odour: Sweet
- pH: 4.46
- Flash point: 66 °C
- Auto-ignition temperature: 295 °C
- Density: 0.946 kg/l (20°C)
- Solubility: Dispersible.
- Log Pow: 0.99 (active ingredient)
- Viscosity, dynamic: 0.0448 Pa.s (20°C)
- Explosive properties: It is not explosive.
- Oxidising properties: No oxidising properties.
- Explosive limits: No data available
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

Azatin

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

12.1. Toxicity

Azatin

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fishes <em>Onchorynchus mykiss</em></td>
<td>&gt; 9,9 mg/l (96h)</td>
</tr>
<tr>
<td>NOEC <em>Chironomus riparius</em></td>
<td>0,247 mg/l (28d)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Azatin

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not readily biodegradable.</td>
</tr>
</tbody>
</table>
Azatin

Log Pow 0,99 (20°C)

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

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: 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. (Azadirachtin)
Transport document description: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azadirachtin), 9, III

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:

14.6. Special precautions for user

14.6.1. Overland transport
Hazard identification number (Kemler No.): 90
Orange plates: 90
3082
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) : nwg - non-hazardous to water

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

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>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1B</td>
<td>Sensitisation — Skin, category 1B</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</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>EUH208</td>
<td>Contains . May produce an allergic reaction</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>