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

1.1. Product identifier

Product form: Mixture
Product name: Solitaire
Product code: MAI 152 C0054
Type of formulation: Suspension concentrate (SC)
Active Ingredient: Propyzamide

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: Herbicide.

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 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]
Carc. 2 H351
Aquatic Acute 1 H400
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)

![GHS08](image1) ![GHS09](image2)

#### Signal word (CLP)

: Warning.

#### Hazardous ingredients

: Propyzamide.

#### Hazard statements (CLP)

: H351 - Suspected of causing cancer.
  
  H410 - Very toxic to aquatic life with long lasting effects.

#### Precautionary statements (CLP)

: P201 - Obtain special instructions before use.
  
  P202 - Do not handle until all safety precautions have been read and understood.
  
  P273 - Avoid release to the environment.
  
  P280 - Wear protective gloves/protective clothing/eye protection/face protection.
  
  P308 + P313 - IF exposed or concerned: Get medical advice/attention.
  
  P405 - Store locked up.
  
  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>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propyzamide</td>
<td>(CAS No) 23950-58-5 (EC index no) 245-951-4</td>
<td>35.4</td>
<td>Carc. 2, H351, Aquatic Acute 1, H400, Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>Ethanediol</td>
<td>(CAS No) 107-21-1 (EC no) 203-473-3 (EC index no) 603-027-00-1 (REACH no) 01-2119456816-28</td>
<td>&lt;= 4</td>
<td>Acute Tox. 4 (Oral), H302</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.
Solitaire
Safety Data Sheet
Date of issue: 02/08/2017
Revision date: 02/08/2017
Version: 2.3

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
Symptoms/injuries
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTI0N 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Water spray
Dry chemical powder
Alcohol resistant foam
Carbon dioxide (CO$_2$).

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: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

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.

SECTI0N 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
No additional information available

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
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)
Herbicide 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.

Skin and body protection: Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.

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>Off-white</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.4 - 8.4</td>
</tr>
<tr>
<td>Relative evaporation rate</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>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</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>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>400 - 800 mPa.s</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</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
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>Solitaire</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; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Irritation : Mild eye irritation.
No skin irritation.

Corrosivity : Not classified

Sensitisation : No sensitizing to guinea pig skin,

Repeated dose toxicity : Not classified

Carcinogenicity : Limited evidence of a carcinogenic effect.

Mutagenicity : Not classified

Toxicity for reproduction : Not classified

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Solitaire</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fishes</td>
<td>&gt; 4.7 mg/l</td>
</tr>
<tr>
<td>LC50 other aquatic organisms</td>
<td>&gt; 5.1 mg/l</td>
</tr>
<tr>
<td>EC50 Daphnia</td>
<td>5.6 mg/l</td>
</tr>
<tr>
<td>ErC50 Algae</td>
<td>5.6 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

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 (Propyzamide 35.4%)
Transport document description : UN 3082 Environmentally hazardous substance, liquid, n.o.s (Propyzamide 35.4%), 9, III

14.3. Transport hazard class(es)
Class (UN) : 9

14.4. Packing group
Packing group (UN) : III

14.5. Environmental hazards
Dangerous for the environment : 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 : 90
3082

Special provision (ADR) : 274, 335, 601
Transport category (ADR) : 3

14.6.2. Transport by sea
No additional information available

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**

Full text of H- and EUH-phrases:

| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Carc. 2 | Carcinogenicity, Category 2 |
| H302 | Harmful if swallowed |
| H351 | Suspected of causing cancer |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |