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

1.1. Product identifier

Product form: Mixture
Product name: Amylo-X WG
Product code: CUSA 100 C1407
Active Ingredient: Bacillus amyloliquefaciens

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. Agriculture.
Use of the substance/mixture: Biological fungicide.

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier:
CERTIS U.S.A., LLC
9145 Guilford Road, Suite 175
Columbia, Maryland 21046
U.S.A

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: 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]
Not classified.
2.2. Label elements

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

Precautionary statements (CLP) : P102 - Keep out of reach of children;
P261 - Avoid breathing dust.
P262 - Do not get in eyes, on skin, or on clothing
P272 - Contaminated work clothing should not be allowed out of the workplace
P281 - Use personal protective equipment as required
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse
P501 - Dispose of contents/container according to local regulations.

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

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

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 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 : Exposure may produce an allergic reaction.

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

The active ingredient contained in this product has a high affinity for activated charcoal. In case of ingestion of large amounts, administrate 5 mg/kg activated charcoal suspension (50g/400mL water).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray.
Dry chemical powder.
Alcohol resistant foam.
Carbon dioxide (CO2).
5.2. Special hazards arising from the substance or mixture
No additional information available

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.

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
No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

- Sweep or shovel spills into appropriate container for disposal.
- Clean using water and a detergent.
- Wash away remainder with plenty of water.

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.
- Wear suitable protective clothing, gloves and eye or face protection.
- Avoid contact with skin and eyes.
- Avoid breathing dust, mist or spray.

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.
### Conditions for safe storage, including any incompatibilities

**Storage conditions**
- Store in dry, well-ventilated area.
- Keep out of the reach of children.
- Keep away from food, drink and animal feedingstuffs.
- Keep in original containers, tightly closed.

### Specific end use(s)

Biological fungicide.

### Exposure controls/personal protection

#### Control parameters

No additional information available

#### Exposure controls

- **Appropriate engineering controls**: Ensure adequate ventilation.
- **Hand protection**: Waterproof gloves.
- **Skin and body protection**: Long sleeved protective clothing.
- **Respiratory protection**: P3 (EN 143); FFP3 (EN149).

### Physical and chemical properties

#### Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Granules.</td>
</tr>
<tr>
<td>Colour</td>
<td>Brown.</td>
</tr>
<tr>
<td>Odour</td>
<td>Yeast like.</td>
</tr>
<tr>
<td>pH</td>
<td>8.6</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>392 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not highly flammable.</td>
</tr>
<tr>
<td>Density</td>
<td>0.43 g/ml</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No explosive properties.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No oxidising properties.</td>
</tr>
</tbody>
</table>

#### Other information

No additional information available

### Stability and reactivity

#### Reactivity

No additional information available

#### Chemical stability

The product is stable at normal handling- and storage conditions.

#### Possibility of hazardous reactions

No additional information available

#### Conditions to avoid

No additional information available

#### Incompatible materials

No additional information available
## 10.6. Hazardous decomposition products
No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Amylo-X WG</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; 5050 mg/kg</td>
</tr>
<tr>
<td>LC₅₀ inhalation rat</td>
<td>&gt; 2.18 mg/l/4h</td>
</tr>
</tbody>
</table>

**Irritation**

: Not classified

**Corrosivity**

: Not classified

**Sensitisation**

: Not classified

**Repeated dose toxicity**

: Not classified

**Carcinogenicity**

: Not classified

**Mutagenicity**

: Not classified

**Toxicity for reproduction**

: Not classified

#### 12. Toxicity

**B. amyloliquefaciens**

<table>
<thead>
<tr>
<th>Amylo-X WG</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC₅₀ Fish (Oncorhynchus mykiss)</td>
<td>LC₅₀ &gt; 8.1 x 10¹⁰ CFU/L (30 days)</td>
</tr>
<tr>
<td>LC₅₀ <em>Daphnia magna</em></td>
<td>EC₅₀ &gt; 2.3 x 10¹⁰ CFU/L (21 days)</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

**Amylo-X WG**

| Persistence and degradability | Biodegradable. Not persistent. |

#### 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 12: Ecological information

#### 12.1. Toxicity

**B. amyloliquefaciens**

<table>
<thead>
<tr>
<th>Amylo-X WG</th>
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#### 12.2. Persistence and degradability

**Amylo-X WG**

| Persistence and degradability | Biodegradable. Not persistent. |

#### 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 | According to national or local legislation. |

### SECTION 14: Transport information

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

#### 14.1. UN number

No dangerous good in sense of transport regulations.

#### 14.2. UN proper shipping name

Not applicable

#### 14.3. Transport hazard class(es)

Not applicable

#### 14.4. Packing group

Not applicable
14.5. Environmental hazards
Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport
No additional information available

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

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Data sources : Safety Data Sheet Amylo-X WG of Certis U.S.A. Revision date April 17, 2013