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

1.1. Product identifier

- **Product form**: Mixture
- **Product name**: GOEMAR® BM 86
- **Synonyms**: 5-0-0 with Secondary and Micronutrients
- **Other means of identification**: EPA Reg. No 83941-2

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

- **Use of the substance/mixture**: Foliar nutritional formulation

1.3. Details of the supplier of the safety data sheet

- **Supplier**: Arysta LifeScience North America LLC
  15401 Weston Parkway, Suite 150
  Cary, NC 27513 – USA

1.4. Emergency telephone number

- **Emergency number**: Exposure Calls (PROSAR): +1-866-303-6952 or +1-651-603-3432 (international)
  Spill Calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

- **GHS-US classification**: Not classified

2.2. Label elements

- **GHS-US labelling**: No labelling applicable

2.3. Other hazards

- **Not applicable

2.4. Unknown acute toxicity (GHS US)

- **Not applicable

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>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-aminoethanol</td>
<td>(CAS No) 141-43-5</td>
<td>&lt; 5</td>
<td>Flam. Liq. 4, H227</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Acute Tox. 4 (Dermal), H312</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 4 (Inhalation:dust,mist), H332</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H35</td>
</tr>
</tbody>
</table>

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret
Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- **First-aid measures general**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- **First-aid measures after inhalation**: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- **First-aid measures after skin contact**: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- **First-aid measures after eye contact**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **First-aid measures after ingestion**: Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after eye contact: May cause slight irritation.

4.3. Indication of any immediate medical attention and special treatment needed
All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Not flammable.
Reactivity: No dangerous reactions known.

5.3. Advice for firefighters
Firefighting instructions: Do not allow run-off from fire fighting to enter drains or water courses. Exercise caution when fighting any chemical fire.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures: Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel
Protective equipment: Wear suitable gloves.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Wear suitable gloves.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up
For containment: Absorb and/or contain spill with inert material, then place in suitable container. Never return spills to original container for re-use.
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections
Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Do not get in eyes, on skin, or on clothing.
Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Do not store near food, foodstuffs, drugs, or potable water supplies. Keep only in the original container in a cool well ventilated place.
Incompatible products: None known.
Incompatible materials: Metals.
Storage area: Store out of frost (-10 °C).

7.3. Specific end use(s)
Fertilizer.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>GOEMAR® BM 86</th>
<th>2-aminoethanol (141-43-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>OSHA</td>
<td>ACGIH TWA (ppm)</td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (mg/m³)</td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (ppm)</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Remark (ACGIH)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Avoid creating mist or spray. Avoid splashing. Eyewash stations.

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear suitable protective clothing and gloves. Use rubber gloves.

Eye protection: In case of splashing or aerosol production: protective goggles.

Skin and body protection: Wear suitable protective clothing. Impervious clothing.

Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Use an approved respirator equipped with oil/mist cartridges.

Other information: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: Green brown
- Odour: Slight
- Odour threshold: No data available
- pH: 7.8 - 8.3 (pure product)
- Melting point: No data available
- Freezing point: No data available
- Boiling point: No data available
- Flash point: > 93.3 °C
- Relative evaporation rate (butyl acetate=1): No data available
- Flammability (solid, gas): No data available
- Explosive limits: No data available
- Explosive properties: No data available
- Oxidising properties: No data available
- Vapour pressure: No data available
- Relative density: 1.27 - 1.285
- Relative vapour density at 20 °C: No data available
- Solubility: Totally soluble in water in all proportions. Water: Solubility in water of component(s) of the mixture:
  - 2-aminoethanol: > 1000 g/l

9.2. Other information

No additional information available
SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reactions known.

10.2. Chemical stability
Stable under normal conditions. Product color changes with time, without effect on its properties.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Avoid excessive heat or cold. Do not store product at a temperature above 40 °C or below -10 °C.

10.5. Incompatible materials
metals.

10.6. Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Likely routes of exposure</th>
<th>Skin and eye contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

2-aminoethanol (141-43-5)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1515 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>1822 (1822 - 3451) mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 1.3 mg/l</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>1515.000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>1822.000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dust,mist)</td>
<td>1.500 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified.
(Not irritating to rabbits on cutaneous application)

Serious eye damage/irritation: Not classified.
(Not irritating to rabbits on ocular application)

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

Symptoms/injuries after eye contact: May cause slight irritation.

SECTION 12: Ecological information

12.1. Toxicity

2-aminoethanol (141-43-5)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>165 mg/l 48 h</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>65 mg/l 48 h</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

2-aminoethanol (141-43-5)

Persistence and degradability: Readily biodegradable.

12.3. Bioaccumulative potential

2-aminoethanol (141-43-5)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>-1.31</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

Mixtures components are completely soluble in water.
2-aminoethanol (141-43-5)
Potential for mobility in soil is very high
0 < Koc < 50

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Waste treatment methods
Do not dispose in household garbage. Dispose of in authorized waste collection plant.
Sewage disposal recommendations
Do not dispose of waste into sewer.
Waste disposal recommendations
Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials
Dispose of container in a licensed facility.

SECTION 14: Transport information
Department of Transportation (DOT)
In accordance with DOT
Not considered a dangerous good for transport regulations
Additional information
No supplementary information available.

ADR
No additional information available

Transport by sea
IMDG
Transport hazard class(es) (IMDG)
Not applicable
Marine pollutant
Not applicable

Air transport
IATA
Transport hazard class(es) (IATA)
Not applicable
Marine pollutant
Not applicable

SECTION 15: Regulatory information
15.1. US Federal regulations
2-aminoethanol (141-43-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
2-aminoethanol (141-43-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations
2-aminoethanol (141-43-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

National regulations
2-aminoethanol (141-43-5)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).
Listed on the Chinese Catalog of Hazardous Chemicals.
15.3. US State regulations

2-aminoethanol (141-43-5)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Minnesota - Hazardous Substance List

SECTION 16: Other information

Indication of changes: GHS classification information.
Revision date: 10/22/2015
Data sources:

Abbreviations and acronyms:
- ACGIH (American Conference of Governmental Industrial Hygienists).
- ATE: Acute Toxicity Estimate.
- CAS (Chemical Abstracts Service) number.
- CLP: Classification, Labelling, Packaging.
- GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
- OSHA: Occupational Safety & Health Administration.
- TSCA: Toxic Substances Control Act.

Full text of H-statements:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Dermal)</th>
<th>Acute toxicity (dermal), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Inhalation:dust,mist)</td>
<td>Acute toxicity (inhalation:dust,mist) Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Flam. Liq. 4</td>
<td>Flammable liquids, Category 4</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation, Category 1B</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
<tr>
<td>H227</td>
<td>Combustible liquid</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard: 0 - Materials that will not burn.
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

Redstone SDS US GHS for Arysta

SDS Prepared by: The Redstone Group, LLC.
6077 Frantz Rd
Suite 206
Dublin, Ohio, USA 43016
614.923.7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.