1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name: Vitastim Ammonia Assimilators
Synonyms: None
Product Form: Liquid

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

Identified uses: Ammonia control

1.3 Details of the supplier of the safety data sheet

Company: Aquafix Inc.
2310 Daniels St.
Madison WI 53718
USA

Telephone: +1 888-757-9577
Monday-Friday
7:30am-4:00pm CST

1.4 Emergency telephone number

Emergency Phone#: Chemtrec +1 800-424-9300

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Eye damage/irritation (Category 1)

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal Word: Danger
Hazard Statement(s): Causes serious eye damage.
Precautionary Statement(s): Avoid breathing dust/mist/vapor/spray. Wear protective gloves/protective clothing/eye protection/face protection. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink, or smoke while handling.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS
None

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances
Hazardous Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Cas-No.</th>
<th>Concentration %</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria Cultures</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Ingredients not precisely identified are proprietary or non-hazardous. Product formulation consists of a range of naturally occurring microorganisms.

4. FIRST AID MEASURES
4.1 Description of first aid measures
General advice
This product is considered non-toxic, if concerned consult a physician.

**In case of skin contact**
Wash exposed area with soap and water.

**In case of eye contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

**If Inhaled**
Remove to fresh air.

**If Ingested**
May cause nausea or diarrhea, drink plenty of water.

4.2 Most important symptoms and effects both acute and delayed
Possible irritation upon contact.

4.3 Indication of any immediate medical attention and special treatment needed
None. If any symptoms persist, seek medical attention.

5. FIREFIGHTING MEASURES
5.1 Extinguishing media
Suitable extinguishing media
Use water, water spray, foam, carbon dioxide (CO2), or dry powder.

Unsuitable extinguishing media
None

5.2 Special hazards arising from the substance or mixture
None
5.3 Special protective equipment for firefighters
No special protective equipment required.

5.4 Further Information
Flash Point (°C) : No information available
Autoignition temperature (°C) : No information available

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions
No special precautions required. Wear adequate personal protective equipment.

6.3 Method and materials for clean up
Maintain good housekeeping practices. Can be washed away with water. No special disposal method required, except that it be in accordance with current local, state/provincial and federal regulations.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling
Wear personal protection equipment.

7.2 Conditions for safe storage
Risks
Not at risk for corrosion, fire, explosion, or chemical reaction. No special instructions to minimize risks.

Place of storage
Store in a cool, dry space between 50-80°F.

Fire/explosion protection
None needed

7.3 Specific end use
None

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
8.1 Control parameters
Components with work place parameters
None

8.2 Exposure controls
Engineering controls
Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment
Eye/face protection : Protective glasses are recommended
Skin :
Hand: Gloves are recommended
Other: Wear appropriate clothing for work
Respiratory protection : Protective mask is recommended
Thermal protection : None
Environmental exposure : None

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
   Appearance : Liquid, light tan in color
   Odor : Natural, yeast like odor
   Solubility : Highly soluble
   Boiling point : No information available
   pH : 7.0-7.5
   Vapor density : No information available
   Melting point : No information available
   Vapor pressure : No information available
   Specific Gravity : 1.0 @ 25°C

9.2 Other information : None

10. STABILITY AND REACTIVITY

10.1 Reactivity : None
10.2 Chemical Stability : Stable
10.3 Possibility of hazardous reactions : None
10.4 Conditions to avoid : Avoid storing with incompatible materials.
10.5 Incompatible materials : Strong acids or bases may inactivate bacterial cultures.
10.6 Hazardous decomposition products : None

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
   Acute toxicity : No known effects
   Skin corrosion/irritation : No known effects
   Eye damage/irritation : No known effects
   Respiratory/skin sensitization : No known effects, possible allergic sensitization
   CMR(Carcinogenity, Mutagenicity, Reproductive toxicity) : No known effects

12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Test Species</th>
<th>Toxicity Value Type</th>
<th>Toxicity Value</th>
<th>Toxivity Value Units</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceriodaphnia dubia</td>
<td>LC50</td>
<td>18946.5</td>
<td>mg/L</td>
<td>48 hours</td>
</tr>
<tr>
<td>Pimephales promelas</td>
<td>LC50</td>
<td>16493.8</td>
<td>mg/L</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

12.1 Toxicity : No known information is available
12.2 Persistence and degradability
No known information is available

12.3 Bioaccumulative potential
No known information is available

12.4 Mobility in soil
No known information is available

12.5 Results of PBT and vPvB assessment
No known ecological information is available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product and packaging can be disposed of in regular trash. No special disposal method required. Follow all applicable local laws for recycling, bagging, and disposal of trash.

14. TRANSPORTATION INFORMATION

14.1 UN NUMBER
Not relevant

14.2 UN proper shipping name
Not relevant

14.3 Transportation hazard class
Not classified as dangerous

14.4 Packing group
Not relevant

14.5 Environmental hazards
None

14.6 Special precautions
None

14.7 Further Information
None

15. REGULATORY INFORMATION

Sara/Title III – CERCLA LIST of Hazardous Substances and Reportable Quantities (40CFR304.4): This product does not contain an ingredient(s) listed as a hazardous ingredient for Emergency Release Notification under section 304

Sara/Title III – List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 300 & 305): This product does not contain an ingredient(s) listed as an extremely hazardous substances (EHS) for Emergency Planning under sections 301-303 and for Emergency Release Notification under section 304.

Sara/Title III – List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372): This product does not contain an ingredient(s) listed as a toxic chemical for Annual Release Reporting Requirements under section 313.

16. OTHER INFORMATION

The information in this SDS was obtained from sources which we believe to be reliable. However, the information is provided without any warranty expressed or implied regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself.

This SDS was prepared and is to be used only for this product. No representation, warranty, or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness. We assume no
responsibility for any loss, damage or expense direct or consequential arising out of use. It is the user’s responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use.