

# SPRING MIX™

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification

#### 1.1. Identification

Product form : Liquid Mixture  
Product name : Spring Mix  
Product code : FF613123sch

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Vermitechnology Unlimited, Inc.  
PO Box 2107  
Monroe, NC 28112  
Phone: 704/774-0745

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin corrosion/irritation, Category 2 H315 Causes skin irritation  
Serious eye damage/eye irritation, Category 2B H320 Causes eye irritation

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation  
H320 - Causes eye irritation

Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302+P352 - If on skin: Wash with plenty of 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  
P321 - Specific treatment (see supplemental first aid instruction on this label)  
P332+P313 - If skin irritation occurs: Get medical attention  
P337+P313 - If eye irritation persists: Get medical attention  
P362+P364 - Take off contaminated clothing and wash it before reuse

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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| Name                       | Product identifier | % | GHS-US classification                            |
|----------------------------|--------------------|---|--------------------------------------------------|
| Water                      | (CAS No) 7732-18-5 |   | Not classified                                   |
| phosphoric acid            | (CAS No) 7664-38-2 |   | Met. Corr. 1, H290<br>Skin Corr. 1B, H314        |
| potassium hydroxide        | (CAS No) 1310-58-3 |   | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1A, H314 |
| ammonia, aqueous solutions | (CAS No) 1336-21-6 |   | Skin Corr. 1B, H314                              |
| urea (57-13-6)             | (CAS No) 57-13-6   |   | Eye Irrit. 2B, H320                              |

Full text of hazard classes and 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 : Remove person to fresh air and keep comfortable for breathing. Allow breathing of fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

- Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Sand. Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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Other information : Dispose of materials or solid residues at an authorized site.

## 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| phosphoric acid (7664-38-2)            |                       |         |
|----------------------------------------|-----------------------|---------|
| ACGIH                                  | ACGIH TWA (mg/m³)     | 1 mg/m³ |
| ACGIH                                  | ACGIH STEL (mg/m³)    | 3 mg/m³ |
| potassium hydroxide (1310-58-3)        |                       |         |
| ACGIH                                  | ACGIH Ceiling (mg/m³) | 2 mg/m³ |
| ammonia, aqueous solutions (1336-21-6) |                       |         |
| ACGIH                                  | ACGIH TWA (ppm)       | 25 ppm  |
| ACGIH                                  | ACGIH STEL (ppm)      | 25 ppm  |
| Water (7732-18-5)                      |                       |         |
| Not applicable                         |                       |         |
| urea (57-13-6) (57-13-6)               |                       |         |
| Not applicable                         |                       |         |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves

#### Eye protection:

Chemical goggles or safety glasses. Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Wear appropriate mask

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## Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                            |                                     |
|--------------------------------------------|-------------------------------------|
| Physical state                             | : Liquid                            |
| Appearance                                 | : Clear, green liquid.              |
| Colour                                     | : clear Green                       |
| Odour                                      | : Nearly odorless Mild ammonia odor |
| Odour threshold                            | : No data available                 |
| pH                                         | : 6.3 - 7                           |
| Melting point                              | : Not applicable                    |
| Freezing point                             | : No data available                 |
| Boiling point                              | : > 93 °C                           |
| Flash point                                | : Non-flammable                     |
| Relative evaporation rate (butylacetate=1) | : No data available                 |
| Flammability (solid, gas)                  | : Non flammable.                    |
| Vapour pressure                            | : No data available                 |
| Relative vapour density at 20 °C           | : No data available                 |
| Relative density                           | : 1.33                              |
| Solubility                                 | : No data available                 |
| Log Pow                                    | : No data available                 |
| Auto-ignition temperature                  | : No data available                 |
| Decomposition temperature                  | : No data available                 |
| Viscosity, kinematic                       | : No data available                 |
| Viscosity, dynamic                         | : No data available                 |
| Explosive limits                           | : No data available                 |
| Explosive properties                       | : No data available                 |
| Oxidising properties                       | : No data available                 |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable. Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Extremely high temperatures. Heat. Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Water-reactive materials. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Extremely high temperatures. The product may reach melting point and decompose to release NH<sub>3</sub>, SO<sub>x</sub>, PO<sub>x</sub>, or CN. fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

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|                                        |                      |
|----------------------------------------|----------------------|
| <b>phosphoric acid (7664-38-2)</b>     |                      |
| LD50 oral rat                          | (Rat)                |
| <b>potassium hydroxide (1310-58-3)</b> |                      |
| LD50 oral rat                          | 333 mg/kg (Rat)      |
| ATE US (oral)                          | 333 mg/kg bodyweight |

|                                 |                                                                                                                    |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>urea (57-13-6) (57-13-6)</b> |                                                                                                                    |
| LD50 oral rat                   | 8471 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value) |
| LD50 dermal rat                 | > 3200 mg/kg (Rat; Literature study)                                                                               |
| LD50 dermal rabbit              | > 21000 mg/kg (Rabbit; Literature study)                                                                           |
| ATE US (oral)                   | 8471 mg/kg bodyweight                                                                                              |

|                                                     |                                                                                            |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------|
| Skin corrosion/irritation                           | : Causes skin irritation.<br>pH: 6.3 - 7                                                   |
| Serious eye damage/irritation                       | : Causes eye irritation.<br>pH: 6.3 - 7                                                    |
| Respiratory or skin sensitisation                   | : Not classified                                                                           |
| Germ cell mutagenicity                              | : Not classified<br>Based on available data, the classification criteria are not met       |
| Carcinogenicity                                     | : Not classified                                                                           |
| Reproductive toxicity                               | : Not classified<br>Based on available data, the classification criteria are not met       |
| Specific target organ toxicity (single exposure)    | : Not classified                                                                           |
| Specific target organ toxicity (repeated exposure)  | : Not classified                                                                           |
| Aspiration hazard                                   | : Not classified                                                                           |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met.                        |
| Symptoms/injuries                                   | : Not expected to present a significant hazard under anticipated conditions of normal use. |

## SECTION 12: Ecological information

### 12.1. Toxicity

|                   |                                                                                                                        |
|-------------------|------------------------------------------------------------------------------------------------------------------------|
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
|-------------------|------------------------------------------------------------------------------------------------------------------------|

|                                           |                                                  |
|-------------------------------------------|--------------------------------------------------|
| <b>phosphoric acid (7664-38-2)</b>        |                                                  |
| LC50 fish 1                               | 138 mg/l (96 h; Pisces; Pure substance)          |
| LC50 other aquatic organisms 1            | 240 mg/l (96 h; Protozoa; Pure substance)        |
| LC50 fish 2                               | 100 - 1000 mg/l (Pisces; Pure substance)         |
| LC50 other aquatic organisms 2            | 100 - 1000 mg/l (Pure substance)                 |
| TLM fish 1                                | 138 ppm (24 h; Gambusia affinis; Pure substance) |
| Threshold limit other aquatic organisms 1 | 240 mg/l (96 h; Protozoa; Pure substance)        |
| Threshold limit other aquatic organisms 2 | 100 - 1000, Pure substance                       |

|                                           |                                                  |
|-------------------------------------------|--------------------------------------------------|
| <b>potassium hydroxide (1310-58-3)</b>    |                                                  |
| LC50 fish 1                               | 28.6 mg/l (24 h; Pisces; Pure substance)         |
| LC50 other aquatic organisms 1            | 100 - 1000 mg/l (96 h)                           |
| LC50 fish 2                               | 80 mg/l (96 h; Gambusia affinis; Pure substance) |
| Threshold limit other aquatic organisms 1 | 100 - 1000, 96 h                                 |

|                                 |                                                           |
|---------------------------------|-----------------------------------------------------------|
| <b>urea (57-13-6) (57-13-6)</b> |                                                           |
| LC50 fish 1                     | > 6810 mg/l (96 h; Leuciscus idus; Nominal concentration) |
| EC50 Daphnia 1                  | > 10000 mg/l (48 h; Daphnia magna; Nominal concentration) |

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|                                           |                                                            |
|-------------------------------------------|------------------------------------------------------------|
| <b>urea (57-13-6) (57-13-6)</b>           |                                                            |
| LC50 fish 2                               | 17500 mg/l (96 h; Poecilia reticulata)                     |
| EC50 Daphnia 2                            | > 10000 mg/l (24 h; Daphnia magna)                         |
| TLM fish 1                                | 17500 ppm (96 h; Poecilia reticulata)                      |
| Threshold limit other aquatic organisms 1 | 120000 mg/l (16 h; Bacteria; Toxicity test)                |
| Threshold limit other aquatic organisms 2 | > 10000 mg/l (Pseudomonas putida)                          |
| Threshold limit algae 1                   | > 10000 mg/l (168 h; Scenedesmus quadricauda; Growth rate) |
| Threshold limit algae 2                   | 47 mg/l (192 h; Microcystis aeruginosa; Growth rate)       |

### 12.2. Persistence and degradability

|                                         |                  |
|-----------------------------------------|------------------|
| <b>Simplot 6-24-6 Liquid Fertilizer</b> |                  |
| Persistence and degradability           | Not established. |

|                                    |                                                                                                            |
|------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>phosphoric acid (7664-38-2)</b> |                                                                                                            |
| Persistence and degradability      | Biodegradability: not applicable. No (test) data on mobility of the components available. Not established. |
| Biochemical oxygen demand (BOD)    | Not applicable                                                                                             |
| Chemical oxygen demand (COD)       | Not applicable                                                                                             |
| ThOD                               | Not applicable                                                                                             |
| BOD (% of ThOD)                    | Not applicable                                                                                             |

|                                        |                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------|
| <b>potassium hydroxide (1310-58-3)</b> |                                                                                          |
| Persistence and degradability          | Biodegradability: not applicable. Low potential for adsorption in soil. Not established. |
| Biochemical oxygen demand (BOD)        | Not applicable                                                                           |
| Chemical oxygen demand (COD)           | Not applicable                                                                           |
| ThOD                                   | Not applicable                                                                           |
| BOD (% of ThOD)                        | Not applicable                                                                           |

|                                               |                                                                                                                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ammonia, aqueous solutions (1336-21-6)</b> |                                                                                                                                                                               |
| Persistence and degradability                 | Readily biodegradable in water. Ozonation in water. Biodegradable in the soil. No (test) data on mobility of the components available. Ozonation in the air. Not established. |

|                               |                  |
|-------------------------------|------------------|
| <b>Water (7732-18-5)</b>      |                  |
| Persistence and degradability | Not established. |

|                                 |                                                                 |
|---------------------------------|-----------------------------------------------------------------|
| <b>urea (57-13-6) (57-13-6)</b> |                                                                 |
| Persistence and degradability   | Inherently biodegradable. Hydrolysis in water. Not established. |
| ThOD                            | 0.27 g O <sub>2</sub> /g substance                              |

### 12.3. Bioaccumulative potential

|                           |                  |
|---------------------------|------------------|
|                           |                  |
| Bioaccumulative potential | Not established. |

|                                    |                                                   |
|------------------------------------|---------------------------------------------------|
| <b>phosphoric acid (7664-38-2)</b> |                                                   |
| Log Pow                            | -0.77 (Estimated value)                           |
| Bioaccumulative potential          | Bioaccumulation: not applicable. Not established. |

|                                        |                                                   |
|----------------------------------------|---------------------------------------------------|
| <b>potassium hydroxide (1310-58-3)</b> |                                                   |
| Bioaccumulative potential              | Bioaccumulation: not applicable. Not established. |

|                                               |                                                   |
|-----------------------------------------------|---------------------------------------------------|
| <b>ammonia, aqueous solutions (1336-21-6)</b> |                                                   |
| Log Pow                                       | -1.14                                             |
| Bioaccumulative potential                     | Bioaccumulation: not applicable. Not established. |

|                           |                  |
|---------------------------|------------------|
| <b>Water (7732-18-5)</b>  |                  |
| Bioaccumulative potential | Not established. |

|                                 |                                                                    |
|---------------------------------|--------------------------------------------------------------------|
| <b>urea (57-13-6) (57-13-6)</b> |                                                                    |
| BCF fish 1                      | 1 (72 h; Brachydanio rerio; Fresh water)                           |
| BCF other aquatic organisms 1   | 11700 (Chlorella sp.)                                              |
| Log Pow                         | < -1.73 (Experimental value; EU Method A.8: Partition Coefficient) |
| Bioaccumulative potential       | Bioaccumulation: not applicable. Not established.                  |

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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming : No known effects from this product.  
GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

### TDG

### Transport by sea

### Air transport

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

|                                               |                  |   |
|-----------------------------------------------|------------------|---|
| ammonia, aqueous solutions                    | CAS No 1336-21-6 | % |
| <b>phosphoric acid (7664-38-2)</b>            |                  |   |
| CERCLA RQ                                     | 5000 lb          |   |
| <b>potassium hydroxide (1310-58-3)</b>        |                  |   |
| CERCLA RQ                                     | 1000 lb          |   |
| <b>ammonia, aqueous solutions (1336-21-6)</b> |                  |   |
| CERCLA RQ                                     | 1000 lb          |   |

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

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### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### phosphoric acid (7664-38-2)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### potassium hydroxide (1310-58-3)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### ammonia, aqueous solutions (1336-21-6)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-statements:

|      |                                         |
|------|-----------------------------------------|
| H290 | May be corrosive to metals              |
| H302 | Harmful if swallowed                    |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation                  |
| H320 | Causes eye irritation                   |

SDS US (GHS HazCom 2012)

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