SAFETY DATA SHEET

Section 1. Identification

Product name: Chem-Gro Fertilizer 4-20-39
Manufacturer's Name: HGI Worldwide Inc dba Hydro-Gardens
Other Means of identification: 4-20-39 4-20 Hydroponic
Product type: Fertilizer

Address: 8765 Vollmer Rd., Colorado Springs, CO. 80908-4710
Telephone Number for Information 719-495-2266
Emergency Telephone (Chemtrec) 800-424-9300

Relevant identified use of the substance or mixture & uses advised against
Use only in accordance with label directions.

Section 2. Hazards Identification

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling & proper use of the product. This SDS should be retained & available for employees & other users of the product.

Classification of the substance or mixture: Not Classified

GHS Label Elements:
Signal Word: None
Hazard statements: No known significant effects or critical hazards

Precautionary Statements
General: Read label before use. Keep out of reach of children. If medical advice is needed, have product label at hand.

Prevention: Not applicable
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable

Supplemental label elements: None known
Hazard not otherwise classified: None known

Section 3. Composition/Information On Ingredients

Substance/mixture: Mixture
Chemical name: None available

There are no additional ingredients present which, within the current knowledge of the supplier & in the concentrations applicable, are classified as hazardous to health or the environment & hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper & lower eyelids. Check for & remove any contact lenses. Get medical attention if irritation occurs.

Inhalation: Remove victim to fresh air & keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing & shoes. Get medical attention if symptoms occur.
Ingestion: Wash out mouth with water. If material has been swallowed & the exposed person is conscious, give small quantities of water to drink. Don't induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute & delayed**

**Potential acute health effects**

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: No known significant effects or critical hazards.
- **Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

- **Eye contact**: No specific data.
- **Inhalation**: No specific data.
- **Skin contact**: No specific data.
- **Ingestion**: No specific data.

**Indication of immediate medical attention & special treatment needed, if necessary**

- **Notes to physician**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Specific treatments**: No specific treatment.
- **Protection of first-aiders**: No actions shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

**Section 5. Fire-Fighting Measures**

**Extinguishing media**

- **Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.
- **Unsuitable extinguishing media**: None known.
- **Specific hazards arising from the chemical**: No specific fire or explosion hazards.
- **Hazardous thermal decomposition products**: Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Nitrogen oxides
  - Halogenated compounds
  - Metal oxide/oxides
- **Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment & self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Section 6. Accidental Release Measures**

**Personal precautions, protective equipment & emergency procedures**

- **For non-emergency personnel**: Not applicable
- **For emergency responders**: Not applicable
- **Environmental precautions**: Avoid dispersal of spilled material & runoff & contact with soil, waterways, drains & sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods & materials for containment & cleaning up

Spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material & place in a designated, labeled water container. Dispose of via a licensed waste disposal contractor. Note: Section 1 for emergency contact information & Section 13 for waste disposal.

Section 7. Handling & Storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking & smoking should be prohibited in areas where this material is handled, stored & processed. Workers should wash hands & face before eating, drinking & smoking. Remove contaminated clothing & protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) & food & drink. Keep container tightly closed & sealed until ready for use. Containers that have been opened must be carefully resealed & kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls / Personal Protection

Occupational exposure limits: None

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms & face thoroughly after handling chemical products, before eating, smoking & using the lavatory & at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure the eyewash stations & safety showers are close to the workstation locations.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn unless the assessment indicates a higher degree of protection: safety glasses with side-shields

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed & the risks involved & should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear & any additional skin protection measures should be selected based on the task being performed & the risks involved by a specialist before handling this product.
Respiratory protection: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazard of the product & the safe working limits of the selected respirator.

### Section 9. Physical & Chemical Properties

#### Appearance
- **Physical State**: Solid (Crystalline Powder)
- **Color**: White to light yellowish
- **Odor**: Fertilizer
- **Odor threshold**: Not available
- **pH**: Not available
- **Melting point**: Not available
- **Boiling point**: Not available
- **Flash point**: Not available
- **Evaporation rate**: Not available
- **Flammability (solid, gas)**: Not available
- **Lower & Upper explosive limits**: Lower: Not available, Upper: Not available
- **Vapor pressure**: Not available
- **Vapor density**: Not available
- **Relative density**: Not available
- **Solubility**: Not available
- **Partition coefficient: n-octanol/water**: Not available
- **Auto-ignition temperature**: Not available
- **Decomposition temperature**: Not available
- **Viscosity**: Dynamic: Not available, Kinematic: Not available

#### Section 10. Stability & Reactivity

- **Reactivity**: No specific test data related to reactivity available for this product or its ingredients
- **Chemical stability**: The product is stable
- **Possibility of hazardous reactions**: Under normal conditions of storage & use, hazardous reactions will not occur.
- **Conditions to avoid**: No specific data.
- **Incompatible materials**: No specific data.
- **Hazardous decomposition products**: Under normal conditions of storage & use, hazardous decomposition products should not be produced.

### Section 11. Toxicological Information

#### Information on toxicological effects
- **Conclusion/Summary**: No known significant effects or critical hazards.

#### Irritation/Corrosion

- **Conclusion/Summary**: May cause skin irritation.
- **Skin**: May cause skin irritation.
- **Eyes**: May cause eye irritation.
- **Respiratory**: May cause respiratory irritation

#### Sensitization

- **Conclusion/Summary**: Not sensitizing - based on the individual components.
**Mutagenicity**

Conclusion/Summary : No known significant effects or critical hazards.

**Carcinogenicity**

Conclusion/Summary : No known significant effects or critical hazards.

**Reproductive toxicity**

Conclusion/Summary : No known significant effects or critical hazards.

**Teratogenicity**

Conclusion/Summary : No known significant effects or critical hazards.

**Specific target organ toxicity (single exposure)**

**Specific target organ toxicity (repeated exposure)** Aspiration hazard

Information on the likely routes of exposure : Not available

**Potential chronic health effects**

Conclusion/Summary : No known significant effects or critical hazards.

General
Carcinogenicity
Mutagenicity
Teratogenicity
Developmental effects
Fertility effects

: No known significant effects or critical hazards.

**Section 12. Ecological information**

**Toxicity**

Conclusion/Summary : Not available

**Persistence & Degradability**

Conclusion/Summary : No known significant effects or critical hazards.

**Mobility in soil**

Soil/water partition coefficient (KOC) : Not available

Other adverse effects : No known significant effects or critical hazards.

**Section 13. Disposal considerations**

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions & any by-products should at all times comply with the requirements of environmental protection & waste disposal legislation & any regional local authority requirements. Dispose of surplus & non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material & its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material & runoff & contact with soil, waterways, drains & sewers.

**Section 14. Transport Information**

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN no.</th>
<th>Proper Shipping Name</th>
<th>Class</th>
<th>PG*</th>
<th>Note</th>
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<td>Not Regulated</td>
<td></td>
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PG*: Packing Group
Section 15. Regulatory Information

Precautionary statements

Signal word: No signal word.
Emergency Overview: Keep out of reach of children.

U.S. Federal regulations
United States inventory (TSCA 8b):
Not determined.

State regulations

International lists

National inventory

Australia: At least one component is not listed.
Canada: At least one component is not listed.
China: At least one component is not listed.
Europe: At least one component is not listed.
Japan: At least one component is not listed.
Malaysia: Not determined.
New Zealand: At least one component is not listed.
Philippines: At least one component is not listed.
Republic of Korea: At least one component is not listed.
Taiwan: Not determined.

Section 16. Other Information

National Fire Protection Association (U.S.A.):

History

Date of issue: 1/1/2017
Date of revision: 1/1/2017
Version: 1.1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards & should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Conforms: GHS (rev 3) (2009)
(This Safety Data Sheet conforms to the requirements of the Hazard Communication Standard (HCS) (29 CFR 1910.1220(g)), revised in 2012.) United States