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U26601 A  
U26601 SB51810

# CANNA

The solution for growth and bloom

## Safety Data Sheet OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 3.

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Version No: 1.0

Revision date: Initial version.

Trade name: **CANNA AQUA VEGA A**

### SECTION 1: Identification

#### Product identifier used on the label

Trade name: **CANNA AQUA VEGA A**

Synonym(s): -

#### Recommended use of the chemical and restrictions on use:

Liquid NK fertilizer.

#### Product category:

Product Category 12 (PC12 Fertilizers),  
Sector of Use 21 (SU21 Consumer uses).

#### Name, address, and telephone number of the chemical Manufacturer/Supplier

##### Manufacturer/supplier:

Hortisol USA Corp  
11400 W. Olympic Blvd., #200  
Los Angeles, CA 90064  
Tel.: +1 (626) 359-5033  
Fax: +1 (877) 233-2488  
Email: [info@cannagardening.com](mailto:info@cannagardening.com)

##### Further information obtainable from:

Emergency Company Number 877-268-9767  
Email [info@hortisol.com](mailto:info@hortisol.com)

Additional Product Information 626-359-5033  
during normal business hours 8 am – 5 pm PST

##### Emergency telephone number

American Association of Poison Control Center Help line 1-800-222-1222

### SECTION 2: Hazards identification

Classification in accordance with paragraph (d) of OSHA 29 CFR 1910.1200:

Product name	GHS Classification
CANNA AQUA VEGA A	Eye Irrit. 2A; H319

Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200:

Hazard pictograms:



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**Trade name:** CANNA AQUA VEGA A

**Signal word:** Warning.

**Hazard statements:**

H319 Causes serious eye irritation.

**Precautions:**

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling.

P280 Wear eye protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

**Other hazards**

Not Applicable

## SECTION 3: Composition/information on ingredients

**Chemical characterization:** Mixture.

**Description:** Preparation based on water, calcium nitrate, potassium nitrate, ammonium nitrate and magnesium nitrate.

**Hazardous ingredients**

Chemical name	CAS number	Concentration %	GHS Classification
Calcium nitrate	10124-37-5	10 - 20	Ox. Sol. 2; H272 Acute Tox. 4 (ingestion); H302 Eye Irrit. 2A; H319.
Ammonium nitrate	6484-52-2	10 - 20	Ox. Sol. 2; H272 Eye Irrit. 2A; H319.
Potassium nitrate	7757-79-1	5 - 10	Ox. Sol. 2; H272.
Magnesium nitrate	10377-60-3	0.1 - 1	Ox. Sol. 2; H272.

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

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret is required.

Occupational exposure limits, if available, are listed in section 8.  
See section 16 for the full text of the H-statements.

## SECTION 4: First aid measures

**Description of first aid measures**

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**General information:**

Get medical attention if symptoms persist.

**Inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact:**

Remove contaminated clothing. Wash with water and soap.

**Eye contact:**

Remove contact lenses, if present, and immediately rinse eyes while holding eyelids open for a sufficient period of time (at least 15 minutes) with lukewarm water. Help the victim with the rinsing process.

**Ingestion:**

Rinse mouth immediately with water (if conscious), and then drink plenty of water. Do not induce vomiting. If the person feels unwell consult a physician or take victim to hospital (show packaging, label or SDS to physician). Place unconscious person on the side in the recovery position. Loosen tight clothing such as a shirt collar, tie, belt or waistband. Keep at rest.

**Most important symptoms and effects, both acute and delayed**

**Inhalation:**

Exposure to vapor concentrations of component dusts higher than the TLV value can be harmful to the health. Potential health effects include: sore throat, cough, shortness of breath, dizziness. Effects may be delayed.

**Skin contact:**

Redness and pain.

**Eye contact:**

May cause irreversible damage to the eyes. Redness. Pain.

**Ingestion:**

Abdominal cramp, nausea, blue skin, feeling of weakness. Contains calcium nitrate which, after ingestion, may cause blood damage (methemoglobinemia).

**Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment and supportive therapy as prescribed.

## SECTION 5: Firefighting measures

**Extinguishing media**

**Suitable extinguishing media:**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water spray.

Foam.

Sand.

Adapt extinguishing measures to suit the environment.

**Unsuitable extinguishing media:**

Powerful water jet.

**Specific hazards arising from the chemical.**

During heating or in case of fire, poisonous gases may be produced.

May be released in event of fire:

Nitrogen oxides (NO<sub>x</sub>).

**Special protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus.

**Other information**

No specific requirements.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ensure sufficient ventilation.  
Wear personal protective equipment.

### Environmental precautions

Do not allow large quantities of product to reach sewage/surface water/groundwater in concentrated form.  
Notify competent authorities in case of release of large quantities into the environment.

### Methods and material for containment and cleaning up

Soak up immediately with absorbent material (sand, dry earth).  
Recycle, if possible.  
Collect in suitable containers for disposal.  
Then flush away residue with plenty of water.

## SECTION 7: Handling and storage

### Handling

#### Precautions for safe handling:

Open and handle package with care.  
Wear suitable protective clothing.  
Ventilation is recommended.  
Do not smoke, eat or drink during use.

#### Information about fire - and explosion protection:

No specific requirements.

### Conditions for safe storage, including any incompatibilities

#### Storage:

Close containers after each use.

#### Requirements to be met by storerooms and receptacles:

Preferably keep in the original packaging.  
Keep in a dark place.

Store in a frost-free environment.

Protect against heat and direct sunlight.

Suitable packaging material: Polyethylene.

Suitable material for tanks and pipelines: Stainless steel, PVC.

#### Information about storage in one common storage facility:

Install partitions in the drip tray to prevent acidic and alkaline fertilizers from coming into contact with one another.

#### Further information about storage conditions:

Recommended storage temperature 10 - 30 °C.

## SECTION 8: Exposure controls/personal protection

### Control parameters

Occupational exposure limit values:

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Ingredient name	Occupational exposure limits
Calcium nitrate	None available
Ammonium nitrate	None available
Potassium nitrate	None available
Magnesium nitrate	None available

### Appropriate Engineering Controls

#### Personal protective equipment:

Remove immediately all contaminated clothing.  
Store protective clothing separately.  
Avoid contact with the eyes.  
Wash hands thoroughly after handling this product.

#### General protective and hygienic measures:

Keep away from foodstuffs and beverages.  
Do not eat, drink or smoke when using this product.  
The usual precautionary measures are to be adhered to when handling chemicals.

#### Respiratory protection:

No specific requirements, normal room ventilation will suffice.

#### Hand protection:



Safety gloves.

The glove material (EN374) has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### Glove material

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### Penetration time of glove material

The exact breakthrough time can be obtained from the manufacturer of the protective gloves and has to be observed.

#### Eye protection:



Tight fitting safety goggles. Eye shower.

#### Body protection:

Wear suitable protective work clothing (in case of splash risk).

#### Measuring procedures:

In order to establish compliance with an exposure limit and to establish that exposure is properly controlled, it may be necessary to determine the concentration of the substances in the inhalation zone or in the general workspace.

#### Environmental exposure controls:

Leakage of the material and concentrated solution must be stopped. Leakage of large quantities into sewage, surface waters and groundwater must be avoided because the material contains calcium nitrate which may lead to eutrophication.

## SECTION 9: Physical and chemical properties

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<b>Appearance</b>	
<b>Physical state:</b>	Liquid.
<b>Color:</b>	Wine-red.
<b>Odor:</b>	Slightly odorant.
<b>Odor threshold:</b>	Not determined.
<b>pH-value</b>	3.9-4.1.
<b>Change in condition</b>	
<b>Melting point/melting range:</b>	Not determined.
<b>Boiling point/boiling range:</b>	Not determined.
<b>Flash Point:</b>	> 93 °C.
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Auto-ignition temperature:</b>	Not determined.
<b>Explosion hazard:</b>	Not determined.
<b>Explosive limits</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapor pressure:</b>	Not determined.
<b>Relative density:</b>	1.151 (water = 1).
<b>Vapor density:</b>	Not determined.
<b>Evaporation rate:</b>	Not determined.
<b>Solubility in/miscibility with water:</b>	Fully.
<b>Partition coefficient n-octanol/water:</b>	Not determined.
<b>Decomposition temperature:</b>	Not determined
<b>Viscosity</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

### Reactivity

#### Chemical stability:

The product is stable if stored and handled as prescribed.

#### Thermal decomposition/Conditions to be avoided:

No decomposition if used as prescribed. Avoid storing at high temperatures (> 30 °C) to prevent degradation of the material or pressure build-up. Avoid low temperatures (< 10 °C) to prevent crystallization from occurring. Material is susceptible to frost.

#### Possibility of hazardous reactions

Contact with strong reducing agents, strong acids and bases.

#### Conditions to avoid

Avoid heat, sparks, open flames, and other sources of ignition. Prevent evaporation in a non-ventilated environment. Protect against heat and direct sunlight. Protect against frost.

#### Incompatible materials

Reducing agents, strong acids and bases, metal powders, combustible materials, chromates, zinc, copper and

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copper alloys, chlorates.

**Hazardous decomposition products**  
 No hazardous decomposition products are formed if stored under normal conditions. In case of heating or fire, irritating or toxic vapors such as nitrogen oxides may be released.

## SECTION 11: Toxicological information

### Toxicology information

#### Acute toxicity from the components:

LD/LC50 values relevant for classification:		
Product information:10124-37-5		
Calcium nitrate		
Oral	LD50	1000 mg/kg (rat) (OECD 423)
Inhalation	LC50	-
Dermal	LD50	> 2000 mg/kg (rat) (OECD 402)
Product information:6484-52-2		
Ammonium nitrate		
Oral	LD50	2950 mg/kg (rat) (OECD 401)
Inhalation	LC50 (4 h)	> 88.8 mg/l (rat) (OECD 403)
Dermal	LD50	> 5000 mg/kg (rat) (OECD 402)
Product information:7757-79-1		
Potassium nitrate		
Oral	LD50	> 2000 mg/kg (rat) (OECD 425) 3750 mg/kg (rat) 1901 mg/kg (rabbit)
Inhalation	LC50 (4 h)	0.527 mg/l (rat) (OECD 403, inhalable dust)
Dermal	LD50	> 5000 mg/kg (rat) (OECD 402)
Product information: 10377-60-3		
Magnesium nitrate		
Oral	LD50	> 5000 mg/kg (rat) (OECD 423)
Inhalation	LC50 (4h)	-
Dermal	LD50	> 5000 mg/kg (rat) (OECD 402)

**The following health risk assessment is based on an assessment of the various ingredients in the product.**

**Likely routes of exposure:**  
 Skin.

**Description of the delayed, immediate, or chronic effects from short- and long-term exposure:**  
 Sore throat, cough, shortness of breath, dizziness. Abdominal cramp, nausea, blue skin, feeling of weakness. Contains calcium nitrate which, after ingestion, may cause blood damage (methemoglobinemia).

**Skin corrosion/irritation:** May cause redness and pain.

**Serious eye damage/irritation:** May cause irreversible damage to the eyes. Redness. Pain.

**Respiratory or skin sensitization:** No sensitizing effects known.

**Germ cell mutagenicity:** Not classified.

**Carcinogenicity:** Not classified.

**Reproductive toxicity:** Not classified.

**Specific target organ toxicity (single exposure):** Not classified.

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**Specific target organ toxicity (repeated exposure):** Not classified.

**Aspiration hazard:** Not classified.

**Other effects:** Not available.

**Listed in the National Toxicology Program (NTP) Report on Carcinogens:** No

**Listed in the International Agency for Research on Cancer (IARC):** No

**Other information:**  
 No further relevant information available.

## SECTION 12: Ecological information

### Toxicology information

#### Ecotoxicity from the components:

Aquatic toxicity:		
Product information:10124-37-5	Calcium nitrate	
Fish	LC50 (96 h)	> 98.9 mg/l (OECD 203)
Water flea	EC50	490 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-
Product information:6484-52-2	Ammonium nitrate	
Fish	LC50 (48 h)	447 mg/l (95% CI 391-513)
Water flea	EC50	-
Algae	EC50	-
Bacteria	EC50	-
Product information:7757-79-1	Potassium nitrate	
Fish	LC50 (96 h)	> 98.9 mg/l (OECD 203)
Water flea	EC50 (48 h)	180 - 200 mg/l (poecilia reticulata)
Algae	EC50	490 mg/l (daphnia magna)
Bacteria	EC50	-
Product information: 10377-60-3	Magnesium nitrate	
Fish	LC50 (96 h)	191 mg/l (95% CI 391-513)
Water flea	EC50 (96 h)	490 mg/l (daphnia magna)
Algae	EC50	-
Bacteria	EC50	-

The following ecological risk assessment is based on an assessment of the various ingredients in the product.

#### Persistence and degradability

Partially inorganic and presumed to be partially biodegradable over the long-term.

#### Behavior in environmental compartments

##### Bioaccumulative potential:

Bioaccumulation in organisms is not expected.

##### Mobility in soil:



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No further relevant information available.

### Other adverse effects

Contains substances that contribute to eutrophication: Nitrates.

## SECTION 13: Disposal considerations

### Waste treatment methods

**Recommendation:**

May be brought to a supervised incineration plant in compliance with local regulations.

### Contaminated packaging

**Recommendation:**

Disposal must be made according to official regulations. Empty the packaging with care. Do not contaminate soil, water or environment with the waste container. Comply with local regulations with regard to the recovery or disposal of waste.

## SECTION 14: Transport information

### Land transport DOT

**DOT class:** Not a dangerous good according to the transport regulations.

**Hazard identification number:** -

**UN number:** -

**Packing group:** -

**Label:** -

**Special marking:** -

**UN proper shipping name:** -

**Tunnel restriction code:** -

### Maritime transport IMDG

**IMDG-class:** -

**UN number:** -

**Label:** -

**Packing group:** -

**EMS number:** -

**Marine pollutant:** -

**Proper shipping name:** -

### Air transport ICAO-TI and IATA-DGR

**ICAO/IATA-class:** -

**UN number:** -

**Label:** -

**Packing group:** -

**Proper shipping name:** -

### Environmental hazards

Marine pollutant: No.

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**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No further relevant information available.

**Special precautions for user**

None.

## SECTION 15: Regulatory information

**Safety, health and environmental regulations specific for the product.**

**Calcium nitrate:**

**Federal and State Regulations:**

TSCA 8(b) inventory: Calcium nitrate tetrahydrate.

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):** CLASS C: Oxidizing material. CLASS F: Dangerously reactive material.

**HMIS (U.S.A.):** Health Hazard: 2, Fire Hazard: 0, Reactivity: 0, Personal Protection: E

**National Fire Protection Association (U.S.A.):** Health: 2, Flammability: 0, Reactivity: 0, Specific hazard: n.a.

**Ammonium nitrate:**

**Federal and State Regulations:**

Connecticut hazardous material survey: Ammonium nitrate Rhode Island RTK hazardous substances: Ammonium nitrate Pennsylvania RTK: Ammonium nitrate Massachusetts RTK: Ammonium nitrate Massachusetts spill list:

Ammonium nitrate New Jersey: Ammonium nitrate New Jersey spill list: Ammonium nitrate TSCA 8(b) inventory:

Ammonium nitrate

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):** CLASS C: Oxidizing material.

**HMIS (U.S.A.):** Health Hazard: 2, Fire Hazard: 1, Reactivity: 1, Personal Protection: E

**National Fire Protection Association (U.S.A.):** Health: 0, Flammability: 0, Reactivity: 3, Specific hazard: n.a.

**Potassium nitrate:**

**Federal and State Regulations:**

Connecticut hazardous material survey.: Potassium nitrate Rhode Island RTK hazardous substances: Potassium nitrate Pennsylvania RTK: Potassium nitrate Massachusetts RTK: Potassium nitrate TSCA 8(b) inventory:

Potassium nitrate

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):** CLASS C: Oxidizing material.

**HMIS (U.S.A.):** Health Hazard: 2, Fire Hazard: 0, Reactivity: 0, Personal Protection: E

**National Fire Protection Association (U.S.A.):** Health: 2, Flammability: 0, Reactivity: 0, Specific hazard: n.a.

**Magnesium nitrate:**

**Federal and State Regulations:**

No products were found.

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):** CLASS C: Oxidizing material.

**HMIS (U.S.A.):** Health Hazard: 2, Fire Hazard: 1, Reactivity: 0, Personal Protection: E

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**National Fire Protection Association (U.S.A.);** Health: 2, Flammability: 1, Reactivity: 0, Specific hazard: n.a.

### Chemical safety assessment

A chemical safety assessment has not been carried out.

## SECTION 16: Other information

This information is based on the current state of our knowledge. It should not be construed as any guarantee of product characteristics, nor does it establish a legally valid contractual relationship.

### List of relevant phrases from sections 2 and 3

Ox. Sol.	Oxidizing solid
Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H319	Causes serious eye irritation

### Abbreviations and acronyms:

CAS:	Chemical Abstracts Service (division of the American Chemical Society)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
EC50:	Half maximal effective concentration
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
TWA	Time-Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety and Health Administration
NTP	National Toxicology program
IARC	International Agency for Research on Cancer

**Training advice:** Before using/handling the product one must read carefully present MSDS.

### Document history

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**Version:** 1

### DISCLAIMER:

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 and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.