SAFETY DATA SHEET

(in accordance with The Hazard Communication Standard (HCS) (29 CFR 1910.1200))

1420-001A-Advanced Nutrients Cultivator Series Base Water Soluble Powder

Section 1: Identification.

Product identifier used on the label and Other means of identification.

Product Name: Advanced Nutrients Cultivator Series Base Water Soluble Powder
Product Code: 1420-001A

Recommended use of the chemical and restrictions on use.
Fertilising Product
Specific end use(s).
Fertiliser [REACH Product Category (PC) 12].
Uses advised against:
Not to be used as food or feed in any forms.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

Company: **Advanced Nutrients U.S. LLC**
Address: 8687 Melrose Ave, Suite G320
City: 90069 - West Hollywood
Province: CA
Telephone: +1-833-420-2902
E-mail: info@advancednutrients.com
Web: www.advancednutrients.com

Emergency phone number: CHEMTREC Emergency Phone Numbers:
1-800-424-9300 (North America, including Canada and Mexico) CCN 613830.
1-703-527-3887 (International) CCN 613830.

Section 2: Hazard(s) Identification.

Classification of the chemical in accordance with paragraph (d) of §1910.1200
In accordance with The Hazard Communication Standard (HCS) (29 CFR 1910.1200):
Acute toxicity (Oral), Category 4 : Harmful if swallowed.
Serious eye damage, Category 1 : Causes serious eye damage.

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

Symbol(s):



Signal Word:
Danger
Hazard statement(s):
H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary statement(s):
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

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P280 Wear protective gloves/protective clothing/eye protection/face 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.
P310 Immediately call a POISON CENTER or doctor/physician.
P501 Dispose of contents/container according to local & state laws.

Contains:
nitric acid, ammonium calcium salt

Other hazards.
In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

Section 3: Composition/Information on Ingredients.

Substances.
Not applicable.

Mixtures.
Chemical name and concentration ranges of all ingredients that are classified as health hazards in accordance with paragraph (d) of §1910.1200 and that are present above their cut-off/concentration limits or ingredients that are below their cut-off/concentration limits and present a health risk:

Identifiers	Name	Concentration	(*)Classification	
			Classification	specific concentration limit
CAS No: 15245-12-2 EC No: 239-289-5	nitric acid, ammonium calcium salt	25 - 100 %	Acute Tox. 4, H302 - Eye Dam. 1, H318	-

(*)The complete text of the Hazard statement(s) is given in section 16 of this Safety Data Sheet.

Section 4: First-Aid Measures.

Description of first aid measures.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.
Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.
Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Dont let the person to rub the affected eye.

Skin contact.
Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.
If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

Most important symptoms and effects, both acute and delayed.
Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.

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Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.
Contact with eyes may cause irreversible damage.

Indication of any immediate medical attention and special treatment needed.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract.

Section 5: Fire-Fighting Measures.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

Extinguishing media.
Suitable extinguishing media:
Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:
Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

Special hazards arising from the mixture.
Special risks.
Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

Advice for firefighters.
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

Section 6: Accidental Release Measures.

Personal precautions, protective equipment, and emergency procedures.
For exposure control and individual protection measures, see section 8.

Environmental precautions: Product not classified as hazardous for the environment, avoid spillage as much as possible.

Methods and materials for containment and cleaning up.
Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.
Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

Reference to other sections: for exposure control and individual protection measures, see section 8, for later elimination of waste, follow the recommendations under section 13.

Section 7: Handling and Storage.

Precautions for safe handling.
For personal protection, see section 8.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.

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Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

Conditions for safe storage, including any incompatibilities.
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Section 8: Exposure Controls/Personal Protection.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
nitric acid, ammonium calcium salt CAS No: 15245-12-2 EC No: 239-289-5	DNEL (Workers)	Inhalation, Chronic, Systemic effects	98 (mg/m³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Exposure controls.
Measures of a technical nature:
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	**100 %**				
Uses:	**Fertilising Product**				
Breathing protection:					
PPE:	Particle filter mask				
Characteristics:	«CE» marking, category III. Made of filtering material, it covers nose, mouth and chin.				
Maintenance:	Check for any tears, defects, etc. before use. Since it is disposable individual protection equipment, it should be replaced after use.				
Observations:	Does not protect worker unless properly adjusted. Follow the manufacturer's instructions regarding suitable use of the equipment.				
Filter Type needed:	P2				
Hand protection:					
PPE:	Protective gloves against chemicals.				
Characteristics:	«CE» marking, category III.				
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.				
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.				
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480	Material thickness (mm):	0,35
Eye protection:					
PPE:	Protective goggles against particle impacts.				

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Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.
Skin protection:	
PPE:	Protective clothing.
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE:	Work footwear.
Characteristics:	«CE» marking, category II.
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident

Section 9: Physical and Chemical Properties.

Information on basic physical and chemical properties.
Physical state: Solid
Colour: Hazy to opaque
Odour: Mild
Odour threshold: Not available
Melting point/freezing point: Not available
Initial boiling point or boiling range: Not available
Flammability (solid, gas): Not available
Lower Explosive Limit: Not applicable
Upper Explosive Limit: Not applicable
Flash point: Not applicable
Auto-ignition temperature: Not applicable
Decomposition temperature: Not available
pH: 4.0-6.0 (5%) (pH Meter/potentiometric/electrometric method)
Kinematic viscosity: Not applicable
Solubility: Not available
Liposolubility: Not available
Hydrosolubility: Soluble in water
Partition coefficient (n-octanol/water): Not applicable
Vapour pressure: Not available
Relative density: Not applicable
Vapour density: Not applicable (Not relevant for this type of product)
Particle characteristics: Not available

Other information.
Explosive properties: Not applicable/Not available due to the nature/properties of the product
Oxidizing properties: Not applicable/Not available due to the nature/properties of the product
Pour point: Not applicable/Not available due to the nature/properties of the product
Blink: Not applicable/Not available due to the nature/properties of the product
Evaporation rate: Not applicable/Not available due to the nature/properties of the product
Viscosity: Not applicable/Not available due to the nature/properties of the product

Section 10: Stability and Reactivity.

Reactivity.

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The product does not present hazards by their reactivity.

Chemical stability.
Stable under the recommended handling and storage conditions (see section 7).

Possibility of hazardous reactions, including those associated with foreseeable emergencies.
The product does not present possibility of hazardous reactions.

Conditions to avoid.
Avoid any improper handling.

Incompatible materials.
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

Hazardous decomposition products.
No decomposition if used for the intended uses.

Section 11: Toxicological Information.

Information on toxicological effects.
There are no tested data available on the product.
Splashes in the eyes can cause serious and irreversible damage.

a) acute toxicity;
Product classified:
Acute toxicity (Oral), Category 4: Harmful if swallowed.

Acute Toxicity Estimate (ATE):
Mixtures:
ATE (Oral) = 513 mg/kg

b) skin corrosion/irritation;
Not conclusive data for classification.

c) serious eye damage/irritation;
Product classified:
Serious eye damage, Category 1: Causes serious eye damage.

d) respiratory or skin sensitisation;
Not conclusive data for classification.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;
Not conclusive data for classification.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Not conclusive data for classification.

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

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Substances present in the composition listed in the National Toxicology Program (NTP) Report on Carcinogens (RoC):
This product does not contain substances listed in the National Toxicology Program (NTP) Report on Carcinogens (RoC).
Substances present in the composition listed in the International Agency for Research on Cancer (IARC) Monographs:
This product does not contain substances listed in the International Agency for Research on Cancer (IARC) Monographs.

Section 12: Ecological Information.

Ecotoxicity.
No information is available regarding the ecotoxicity of the substances present.

Persistence and degradability.

No information is available regarding the biodegradability of the substances present.
No information is available on the degradability of the substances present.
No information is available about persistence and degradability of the product.
Bioaccumulative potential.
No information is available regarding the bioaccumulation of the substances present.

Mobility in soil.
No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

Other adverse effects.
No information is available about other adverse effects for the environment.

Section 13: Disposal Considerations.

Waste treatment methods.
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of the Resource Conservation and Recovery Act (RCRA) and the Resource Conservation and Recovery Act Information (RCRAInfo) regarding waste management.

Section 14: Transport Information.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

In accordance with DOT

Not Dangerous Good.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR)

Not Dangerous Good.

Section 15: Regulatory Information.

Safety, health and environmental regulations specific for the product.
VVOC content (p/p): 0 %
VVOC content: 0 g/l

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VOC content (p/p): 0 %
VOC content: 0 g/l
SVOC content (p/p): 0 %
SVOC content: 0 g/l
VVOC: Very volatile organic compounds.
VOC: Volatile organic compounds.
SVOC: Semi volatile organic compounds.

Information on the TSCA Inventory (Toxic Substances Control Act) USA:

CAS No	Name	State
15245-12-2	nitric acid, ammonium calcium salt	Registered
15708-41-5	sodium feredetate	Registered

The product is not affected by the procedure established by the Rotterdam Convention, concerning the export and import of dangerous chemicals.

The Superfund Amendments and Reauthorization Act (SARA).
SARA Title III and it sets requirements for local and state emergency planning around hazardous chemicals, the right of the public to access information on chemical hazards in their community, and the reporting responsibilities for facilities that use, store, and / or release hazardous chemicals.

SARA Title III has four provisions (any facility with responsibilities under one section will likely have additional responsibilities under another section, consult SARA for more information):
-Emergency Planning (Sections 301-303)
-Emergency Release Notification (Section 304)
-Hazardous Chemical Storage Reporting Requirements (Section 311-312)
-Toxic Chemical Release Inventory (Section 313)

Information related to the product:
Section 302, Extremely Hazardous Substances (EHSs)(40 CFR part 355 Appendix A and Appendix B) and section 304, in the event of an accidental chemical release that exceeds minimal Reportable Quantity (RQ):

Not Applicable.

Section 311, Requires facilities with hazardous chemicals in quantities above certain thresholds (consult OSHA for more information) to provide copies of the SDSs for those chemicals to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC) and local fire department.

Section 312, Companies with chemicals in sufficient quantities to trigger obligations under Section 311 must also submit an annual emergency and hazardous chemical inventory form to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC) and local fire department

Section 313, requires facilities with 10 or more employees that use certain toxic chemicals in quantities above threshold levels to report annually on the use, release and disposal of those chemicals, substances identified in section 3:

Not Applicable.

Visit the EPA's website for the most up-to-date information on EPCRA and other environmental considerations.

Proposition 65 warnings
Information related to The Safe Drinking Water and Toxic Enforcement Act of 1986, (better known by its original name of Proposition 65):

There are no substances in section 3 present in the list of chemicals that can cause cancer, birth defects or other reproductive harm (Proposition 65 List).

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Section 16: Other Information.

Complete text of the hazard statement(s) that appear in section 3:

H302 Harmful if swallowed.
H318 Causes serious eye damage.

Classification codes:

Acute Tox. 4: Acute toxicity (Oral), Category 4
Eye Dam. 1: Serious eye damage, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
PPE: Personal protection equipment.

Key literature references and sources for data:
The Hazard Communication Standard (HCS) (29 CFR 1910.1200)
United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
https://www.osha.gov
https://www.epa.gov/
http://echa.europa.eu/

The information given in this Safety Data Sheet has been drafted in accordance with The Hazard Communication Standard (HCS) (29 CFR 1910.1200) and United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Employers must ensure that the SDSs are readily accessible to employees for all hazardous chemicals in their workplace.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

-End of safety data sheet..-