Safety Data Sheet

Advanced Nutrients True Organics Ancient Earth

Section 1. Identification

GHS product identifier	:	Advanced Nutrients True Organics Ancient Earth
Other means of identification	:	Product Code: 2053 Formula Code: 001A-OIM
Recommended use of the chemical and restriction on use	:	A plant nutrient used to obtain faster growth and larger yields in all kinds of growing media. Not to be used as food or feed in any forms.
Supplier/Manufacturer's details	:	Advanced Nutrients Ltd. 109-31063 Wheel Ave. Abbotsford, BC Canada V2T6H1 Tel: (877) 604-8637 Email: info@advancednutrients.com www.advancednutrients.com
Emergency Phone number	:	Transportation Emergency Number – CHEMTREC 1-800-424-9300 U.S.A, Canada, International

Section 2. Hazard Identification

GHS classification of the substance/mixture	:	Neither the mixture nor its major constituents are listed in (a) the CLP/GHS database (Table 3.1 and 3.2 of Annex VI to CLP) and (b) OSHA Laws & Regulations (29 CFR - 1910 Subpart Z: Table Z-1 to Z-3) as hazardous materials.
GHS label elements		
Pictogram symbol	:	Not applicable.
Signal word	:	Not applicable.
Hazard statement	:	Not hazardous.
Precautionary statement		
General	:	Read label before use. Keep out of reach of children.
Prevention	:	Wash hands thoroughly after handling.
Response	:	If skin or eye irritation occurs get medical advice/attention.
Storage	:	Store in cool and dry place.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards (not covered by the GHS)	:	None known.

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Section 3. Composition/Information on Ingredients

Substance/Mixture	:	Mixture.
Chemical identity	:	Not available.
Common name/synonym	:	Not available.
CAS number and other unique identifiers	:	Not applicable.
Impurities and stabilizing additives	:	Not applicable.

Ingredient name	CAS number	% (w/w)	Classification according to OSHA Laws & Regulations
Potassium Sulfate	7778-80-5	1-10	Not classified as hazardous.

The chemical identity of the remaining ingredients and their exact proportions used in the mixture are a proprietary trade secret (protected by the Confidential Business Information – CBI) and, within the current knowledge of the manufacturer and in the concentration applicable, they are not hazardous to health or the environment.

Section 4. First-aid Measures

Description of necessary measures

Self-protection of first-aiders	:	No special protection is required.
General information	:	Remove contaminated clothing immediately. In case of accident or unwellness, seek medical attention immediately.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed:

Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Eye contact	:	If in eyes, it causes eye irritation.
Ingestion	:	If swallowed, it irritates mouth, throat and stomach.

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Indication of immediate medical attention and special treatment needed:

Notes to physician : Treat symptomatically.

Specific treatments : No specific treatment.

See also toxicological information (Section 11).

Section 5. Fire-fighting Methods

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 hazard.
Special protective equipment for fire-fighters	:	Firefighters may enter the area if a self-contained breathing apparatus (SCBA) and a full face piece is worn.
Special protective precautions for fire-fighters	:	No special protection is required.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	Put on appropriate personal protective equipment.
For emergency personnel	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and clean up

Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment

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	plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for safe handling		
Advice on general hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Conditions for safe storage and 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) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls/Personal Protection

Control parameters		
Occupational exposure limits	:	Not applicable according to OSHA's mandatory PELs in the Z-Tables.
Biological limit values	:	None.
Appropriate engineering controls	:	No special ventilation requirements. 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.
Individual protection measures		
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the

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		lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal Protective Equipment (PPE)	:	PPE should be used in conjunction with other control measures, including engineering controls, ventilation and isolation. See Section 5 (Fire-fighting measures) of the SDS for specific fire/chemical PPE advice.
Eye/face protection	:	Do not get in eyes. Wear chemical safety goggles and a face shield if splashing hazard exists.
Skin protection	:	Avoid skin contact. Wear gloves when handling the product directly.
Respiratory protection	:	Not required under normal conditions of use.
Thermal hazards	:	None.

Section 9. Physical and Chemical Properties

Appearance (physical state)	:	Liquid, dark and opaque
Odor	:	Odorless
Odor threshold	:	Not available
pH	:	5.64
Melting point/Freezing point	:	Not available
Initial boiling point and boiling range	:	100°C (212°F)
Flash point	:	Not available
Evaporation rate	:	Not available
Flammability (solid, gas)	:	Not flammable
Upper/lower flammability or explosive limits	:	Not applicable
Vapor pressure	:	Not available
Vapor density	:	Not available
Relative density	:	1.025 g/mL
Solubility (ies)	:	Miscible in water
Partition coefficient: n-octanol/water	:	Not available
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
Viscosity	:	Not available

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Section 10. Stability and 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 and use, hazardous reactions will not occur.
Conditions to avoid	:	Freezing temperatures.
Incompatible materials	:	Not available.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Acute toxicity

Ingredient	Toxicity	Species	Dose*	Remark
Potassium Sulfate	Oral LD50	Rat	2000 mg/kg bw	No sign of toxicity
	Inhalation LC50	Rat	3.6 mg/m^3 air	
	Dermal LD50	Rat	2000 mg/kg bw	Not toxic

*- Obtained from ECHA (Updated October 12, 2018)

Skin corrosion/irritation	:	There is no data available.
Serious eye damage/ irritation	:	There is no data available.
Respiratory or skin sensitization	:	There is no data available.
Germ cell mutagenicity	:	There is no data available.
Carcinogenicity	:	There is no data available.
Reproductive toxicity	:	There is no data available.
STOT-single exposure	:	There is no data available.
STOT-repeated exposure	:	There is no data available.
Aspiration hazard	:	There is no data available.

The Likely routes of exposure, health effects and Symptoms related to the physical, chemical and toxicological characteristics

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.

Delayed and immediate effects and also chronic effects from short or long term exposure

Short-term exposure

Potential immediate effects	:	No known significant effects or critical hazards.
Potential delayed effects	:	No known significant effects or critical hazards.

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Long-term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential Chronic health effect : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimate

Oral : No data available.

Inhalation of vapors : No data available.

Section 12. Ecological Information

Toxicity

Ingredient name	Result*	Species	Exposure	Reference
Potassium Sulfate	Acute LC50 720 mg/l Fresh water	Aquatic invertebrate - Daphnia	48 hours	ECHA
	Acute LC50 680 mg/l Fresh water	Fish- Fathead minnows	96 hours	ECHA

Persistence and degradability : There is no data available.

Bio accumulative potential : There is no data available.

Mobility in soil : There is no data available.

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

Section 13. Disposal Considerations

Disposal of waste methods : Disposal of all waste must be done in accordance with municipal, provincial and federal regulations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. No sewage disposal!!

Contaminated packaging : Empty containers should be recycled or disposed of through an approved waste management facility. Persons conducting disposal, recycling or reclamation activities should follow the information in Section 8 of this SDS.

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Section 14. Transport Information

Identification of ingredients according to UN Model Regulations	
UN number	This product is a mixture of ingredients which are not listed as 'Dangerous Goods' in Chapter 3.2 of UN Recommendations on the Transport of Dangerous Goods and/or one or more ingredients are included in the list but their mixture is exempted from the same Regulation based on the Articles 2.0.2.5 (C), 2.0.2.7 and 3.3.1 No. 208.
UN proper shipping name	
Transport hazard class(es)	
Packing group	
Special precaution for user	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
Transport in bulk	Not applicable (≤ 1000L-container).

Environmental hazards

Ingredient's name	IMDG	UN	ADR	RID	ADN
Potassium Sulfate	No	No	No	No	No

Section 15. Regulatory Information

Safety, health and environmental regulations specific for the product in question	:	No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other Information

Prepared by	:	Department of Product Development, Advanced Nutrients Ltd., Canada
Date of Preparation (d/m/y)	:	14/12/2018
Version	:	2
Date of Revision	:	16/04/2020
Revised Sections	:	Section 1
Key Acronyms:		
ADN	:	The European Agreement concerning the International Transport of Dangerous Goods by Inland Waterways
ADR	:	The European Agreement concerning the International Carriage of Dangerous Goods by Road
BW	:	Body Weight
IATA	:	International Air Transport Association shipment of Dangerous Goods Regulation
IMDG	:	International Maritime Dangerous Goods code
RID	:	The Regulation concerning the International Carriage of

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Dangerous Goods by Rail

SDS : Safety Data Sheet

Key Literature References:

Convention concerning International Carriage by Rail (COTIF) Appendix C – Regulation concerning the International Carriage of Dangerous Goods by Rail (RID), with effect from 1 January 2013. Intergovernmental Organization for International Carriage by Rail (OTIF). Berne, Switzerland, 2012.

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International Maritime Dangerous Goods (IMDG) Code Volume 1 and 2. Incorporating Amendment 33-06, 2006 Edition. International Maritime Organization. London, 2006.

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Recommendations on the Transport of Dangerous Goods – Manual of Test and Criteria. 5th Edition. ST/SG/AC. 10/11/Rev. 5. United Nations, New York and Geneva, 2009.

Recommendations on the Transport of Dangerous Goods – Model Regulations. 18th Edition. Volume I and II. ST/SG/AC. 10/1/Rev. 18. UN, New York and Geneva, 2013.

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council 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. Official Journal of the European Union L 353/1. 2008.

Others : The data here is for hazard communication to our employees, our customers and their employees and authorized regulatory agencies. For the intended purpose, this SDS may be duplicated or the data transcribed to an alternative form.

Note: The information contained herein is provided in good faith and is believed to be correct as of the date of hereof. However, Advanced Nutrients Ltd. makes no

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