

SAFETY DATA SHEET

VEDAGRO BIO-ORGANIC FERTILIZER LIQUID

SDS No. 014-7

1. PRODUCT AND SUPPLIER IDENTIFICATION

Ingredient	CAS number	Name and address of manufacturer:
See section 3	N/A	<u>VEDAN VIETNAM ENTERPRISE CORP., LTD.</u>
EC number: N/A		National Road 51, Hamlet 1A, Phuoc Thai village, Long Thanh District, Dong Nai Province, Vietnam
Common name of the substance: Vedagro Bio-Organic Fertilizer Liquid		Tel: (+84)251-3825111, Fax: (+84)251-3825138
Trade name: N/A		Emergency phone number: (+84)1800.599.902
Recommended use Stimulate root growth; improve the formation ratio of flower, fruit. Increase the absorption of fertilizer. Increase productivity and quality of agricultural products.		Contact address in case of emergency: <u>VEDAN VIETNAM ENTERPRISE CORP., LTD.</u> Tel: (+84)251-3825111, Emergency phone number:(+84)1800.599.902

2. HAZARDS IDENTIFICATION

a) GHS classification and information classified in accordance with available valid data provided by countries, areas or testing organizations

According to Vietnamese legislation: This product possibly cause harm to humans, animals, plants, property and the environment in transport, storage and preservation condition, for appropriate and right using purpose.

b) GHS label elements

In Vietnam: Labeling contents are under the guidance of Decree 43/2017 / ND-CP and Decree No. 111/2021/NĐ-CP amendments to some articles of government's Decree No 43/2017/ND-CP dated april 14, 2017 on goods labels; Circular 32/2017 / TT-BCT specifying and guiding the implementation of some articles of chemical law and decree 113/2017 / ND-CP dated October 9, 2017 of the Government detailing and guiding the implementation of some articles of chemical law.

For export: Labeling contents are according to legal regulations of importing countries.

Precautionary statements:

Vedagro Bio-Organic Fertilizer Liquid does not cause allergies, but users should rinse with water and change contaminated clothing after contact with the product. If fertilizer gets in the eyes when using, it is recommended to use clean water to wash eyes gently.

Vedagro Bio-Organic Fertilizer Liquid can be degradable in soil, but it is not allowed to be poured fertilizer into rivers and lakes, in case fertilizer is used when it rains, it should pay attention not to let rainwater roll manure into rivers and lakes.

Storage instructions:

See section 7.

Instructions for use:

Depending on the type of crop and its age, it could be directly or diluted accordingly. Fertilization method as follows:

Crop	Dose	Periods
Maize	4,000-5,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again.
Casava	5,000-6,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again.
Sugar cane	5,000-6,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again. After finished harvest, fertilizer will be applied at germination period.
Cotton-plant	2,000-3,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again.
Tobacco	1,500-2,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again.
Cashew	2,000-4,000 Liter/ha/crop	- Before flowering: Apply 1/3 of the fertilizer (September - October) - After haverting: Apply 2/3 of ferfertilizer (May - July)
Rubber plant	2,000- 4,000 Liter/ha/crop	- Basic construction phase: Apply fertilizer from April to November; dig holes near the plants to fertilize and backfill after fertilizing. - Business period: Apply fertilizer before rainy season; dig holes near the plants to fertilize and backfill after fertilizing.
Coffee plant	4,000- 8,000 Liter/ha/crop	Divide into 3 times for fertilizing: Early, middle and late of rainy season; Dig holes near the plants to fertilize and backfill after fertilizing; or dilution 3-4 times and use as irrigation water.
Tea plant	3,000-4,000 Liter/ha/crop	Divide into 3 times for fertilizing: Early, middle and late of rainy season.
Peanut, green	2,000-3,000	Applying basal fertilizer 5-10 days prior to planting, before fertilizing

bean, soy bean	Liter/ha/crop	the soil should be turned over, then the soil must be immediately fill again.
Tomato, Eggplant, Watermelon, Beans Cove, Bitter Melon, Cucumber ...	3,000-4,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again.
Vegetable	3,000- 4,000 Liter/ha/crop	Applying basal fertilizer 5-10 days prior to planting, before fertilizing the soil should be turned over, then the soil must be immediately fill again.
Acacia auriculiformis, Eucalyptus	2,000-3,000 Liter/ha/crop	Divide into 2 times for fertilizer; dig holes near the plants to fertilize and immediately backfill after fertilizing.
Fruit tree, Mango, Rambutan, Durian, Orange, Tangerine, longan ...	5-10 Liter/tree/crop	Basic construction phase: Apply fertilizer 1 times in early or late rainy season, dig holes near the plants to fertilize and backfill after fertilizing.
	10 - 20 Liter/tree/crop	Business stage: Apply fertilizer after harvesting, dig trench or ditch near tree to fertilize and backfill after fertilizing.

c) Other hazards:

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common name of the substance	Ingredient	CAS number	Chemical formula
Vedagro Bio-Organic Fertilizer Liquid	L-Glutamate production residue meal	-	-
	Ammonia	7664-41-7	NH ₃

4. FIRST-AID MEASURES

a) Measures relevant to the route of exposure

- Accident in case of eye exposure (splashed, touched on the eyes): Rinse out with plenty of water with the eyelid held wide open. Immediately take to eye specialist.
- Accident in case of skin exposure (touched on skin): Wash off with water/shower.
- Accident in case of respiration exposure (breathing under form of vapor, gas): Under normal conditions for use, product is not considered a hazard when inhaled.
- Accident in case of ingestion exposure (eating, drinking, swallowing): Consult doctor if feel unwell.

b) Most important symptoms/effects, acute and delayed

No data available.

c) Indication of immediate medical attention and special treatment needed

No data available.

5. FIRE-FIGHTING MEASURES

a) Suitable extinguishing media

Use of firefighting equipment must be appropriate with adjacent materials.

b) Toxic substances emitted from fires

It is non-flammable.

c) Special protective equipment and precautions for fire fighting.

Do not stay in the danger zone without suitable protection clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

a) Personal protective equipment and emergency procedures

Personal protective equipment: See section 8.

Emergency procedures: Prevent from spreading or entering drains, ditches or rivers by using sand, soil, or other appropriate barriers. Inform the local authorities if the spill is not controlled.

b) Environmental precautions

Leakage can cause pollution. Precautions should be taken to prevent from spreading or entering drains.

c) Methods and materials for containment and cleaning up

Take up dry. Forward for disposal. Clean up affected area.

7. HANDLING AND STORAGE

a) Measures and requirements for safe handling (e.g., ventilation, only using in closed systems, using explosion-proof electrical equipment, internal transport, etc.)

Need to equip personal protective according to item 8.

b) Measures and requirements for safe storage (e.g., temperature, arrangement, limits to sources of explosion and avoidance of storing some chemicals together, etc.).

- Store Vedagro in cool place. If it is stored in a container, do not cover tightly, avoiding increased air pressure in the container.
- Store in tanks, drums, barrels, flexitank, IBC tank, cans, covered holes and other materials suitable as per customer requirements.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

a) Control parameters (e.g., occupational exposure limit values or biological limit values)

The product does not contain any substances that need to control limit values of occupational exposure.

b) Appropriate engineering controls

Protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective equipment to product should be ascertained with the respective supplier.

c) Individual protection measures and personal protective equipment

- Respiratory protection: Recommend to use.
- Eyes/Face protection: Wear goggles or face shield if there is a risk of splashing.
- Hand protection: Recommend to use.
- Hygiene measures: General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Physical state: Liquid.	b) Boiling point (°C): No information.
c) Color: Dark brown.	d) Melting point (°C): Liquid product
đ) Particular odour: Characteristic of the product.	e) Flash point(°C): (Flash point) by determination method: No information.
g) Vapor pressure (mm Hg) at standard temperature, pressure : No information	h) Self-ignition temperature (°C): No information.
i) Gas proportion (air = 1) at standard temperature, pressure: 1.1	k) Upper flammability/explosive limits(% of mixture with air): No information.
l) Solubility in water: No information.	m) Lower flammability/explosive limits (% of mixture with air): No information.
n) pH: ≥ 5.0	o) Evaporation rate: No information.
p) Relative density (kg/m ³): No information.	k) Other property if any: No information.

10. PRODUCT STABILITY AND REACTIVITY

a) Possibility of reactions

Reacts with strong oxidizing agents.

b) Stability (heat resistance, sensitivity to the effects of friction, shock, etc.)

Stable under recommended conditions of use and preservation.

c) Dangerous reactions (corrosion, fire, explosion...)

No hazardous reactions under normal conditions of use and storage.

d) Conditions to avoid (Ex: electrostatic, vibration, shaking ...)

No hazardous reactions under normal conditions of use and storage.

d) Incompatible materials

No information

e) Decomposition reaction and products of the decomposition reaction

No information

11. TOXICOLOGICAL INFORMATION

a) Information about the likely routes of exposure

- Accident in case of eyes exposure: No information.
- Accident in case of skin exposure: No information.
- Accident in case of inhalation exposure: Under normal conditions for use, this product is not considered a hazard when inhaled.
- Accident in case of ingestion exposure: No information.

b) Symptoms related to product, toxicological and ecotoxicological characteristics

No information.

c) Immediate, delayed and chronic effects from short-term and long-term exposure

No information.

d) Numerical measures of toxicity (acute toxicity estimates)

No information.

12. ECOLOGICAL INFORMATION

a) Ecotoxicity (aquatic and terrestrial): No information.

b) Persistence and degradability: No information.

c) Bioaccumulative potential: No information.

d) Mobility in soil: No information.

d) Other adverse effects: No information.

13. DISPOSAL CONSIDERATIONS

- **Product:** Observe local and national environmental regulations on disposal.
- **Packaging:** Disposal of the packaging as applied to the product.

14. TRANSPORT INFORMATION

- The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
- Product is transported by clean, dry means.

15. REGULATORY INFORMATION

Shall comply with:

- Law on Product and Goods Quality No. 05/2007/QH12.
- Crop Production Law 31/2018/QH14.
- National technical regulation on fertilizer quality- QCVN 01 -189:2019/BNNPTNT
- Decree 84/2019/NĐ-CP On Fertilizer Management.
- Decree 43/2017/ND-CP dated april 14, 2017 on goods labels and Decree No. 111/2021/NĐ-CP amendments to some articles of government's Decree No 43/2017/ND-CP dated april 14, 2017 on goods labels; Circular 32/2017 / TT-BCT specifying and guiding the implementation of some articles of chemical law and decree 113/2017 / ND-CP dated October 9, 2017 of the Government detailing and guiding the implementation of some articles of chemical law.
- Other relevant legal documents.

16. OTHER INFORMATION

Date of compiling slip: 2010/12/29

Latest date of modification, addition: 18/05/2024

Name of compiling organization or individual: VEDAN VIETNAM ENTERPRISE CORP., LTD.

Note for reader:

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.