

Material Safety Data Sheets

Organic Soil Activator (OSA)

1. Identification of the Product and the Company

Product Name	Organic Soil Activator, OSA
Product No.	ERC-001
Supplier	National Kaohsiung First University of Science and Technology (NKFUST) No. 2 Jhuoyue Rd., Nanzih District, Kaohsiung City 811, Taiwan , R.O.C. TEL: +886 +7 6011000 ext.2395 FAX: +886 +7 6011061 http://www.osatw.com/index.php
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2. Composition/Information on Ingredients

Substance	Mixture
Name	Organic Soil Activator
Synonym	Organic Compound Nutrients/ Organic Compound Trace Elements
CAS No.	-
Hazardous	None
Ingredients (%)	
Mixture	Organic Ferment Product (Compound Trace Elements and Amino Acids for Microbe Growth)
Chemical	Organic Ferment Product (non-hazardous ingredients, compound nutrients)
Characteristics	

3. Hazards Identification

The Primary Hazards

Health Hazards	Small amount of inhalation does not cause adverse reactions.
Environmental Hazards	Under normal use with biodegradation, no hazards.
Physical & Chemical Hazards	Under normal use with biodegradation, no hazards.
Specific Hazards	Under normal use with biodegradation, no hazards.
Cardinal Symptoms	Under normal use with biodegradation, no hazards.

Classifications -

4. *First Aid Measures*

For Different Routes of Exposures

- Inhalation No hazards. If feeling unwell, move to fresh air. If still feeling unwell, get medical attention immediately.
- Skin Contact If skin has allergic reactions, wash thoroughly with water and soap.
- Eye Contact Flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
- Ingestion If feeling unwell, get medical attention immediately. Inducing vomiting by a physician.

The Primary None

Symptoms & Hazards

Protections for None

Emergency Personnel

Notes for Physicians According to the condition of the patient

5. *Fire Fighting Measures*

Extinguishing Media Water, water spray, carbon dioxide, dry powder

Specific Hazards None

Specific None

Extinguishing

Procedures

Protective Measures None

for Fire Fighters

6. *Accidental Release Measures*

Personal Precautions According to the emergency condition on the spot, decide if needed to withdraw personnel or close the spot.

Environmental Precautions Dig ditches or use proper blocking equipment to prevent spreading. Isolate the area by safety line.

Spill Clean up Flush the environment with plenty of water.

Methods

7. *Handling and Storage*

Handling Precautions Avoid sunshine. Indoor good ventilation is required.

Storage Precautions Store in large PE container in a dry and cool place.

8. *Exposure Controls/Personal Protection*

Engineering Controls Proper ventilation system and place

Control Parameters

TWA-8hrs	-
STEL	-
Maximum	-
Exposure Limit	
Biological	-
Indicators	

Personal Protection

Respiratory Protection	Due to peculiar smell, general or activated carbon masks can prevent inhalation.
Hand Protection	Wear protective gloves (plastic or silica-gel gloves).
Eye Protection	Goggles are recommended.
Skin/Body Protection	Remove contaminated clothing. Wash clothing before reuse.
Hygiene Measures	Keep the environment clean and dry. Prevent mosquitoes breeding.

9. Physical and Chemical Properties

Physical State	Liquid with little sludge and few particles
Shape	Liquid
Color	Dark brown
Odor	
pH	6.0~7.5
Boiling Point/Range	100°C
Decomposition	-
Temperature	
Flash Point	-
Test Method	-
Auto-ignition	-
Temperature	
Exposure Limit	No
Vapor Pressure	-
Vapor Density	-
Density	1.01~1.07 (H ₂ O=1.0)
Solubility	100%

10. Stability and Reactivity

Stability	Stable under room temperature.
Potentially Hazardous Reactions	Properties of the product will be destroyed in contact with strong acid or alkali, but no hazardous polymerization will be caused.
Conditions to Avoid	Avoid direct sunlight (perishable). Avoid storage without ventilation system.

Save period: 3 years or to the content amendment

Materials to Avoid Oxide, strong acid and alkali
Hazardous None
Decomposition
Products

11. Toxicological Information

Acute Toxicity None
Local Effects Contacting with eyes will cause slight and temporal discomfort.
Irritation Contacting with sensitive skin or eyes will cause slight and temporal irritation.
Subchronic or
Chronic Toxicity Feeding animals (fish, shrimp or chicken) chronically shows harmlessness.
Specific Effects None

12. Ecological Information

Potential No bioaccumulation. No toxicity to animals or plants.
Environment Effects The product is non-toxic in water and biodegradable.
and Mobility

13. Disposal Considerations

Disposal Methods Hazardous waste identification code: inapplicable
Waste characteristics and handling have to be in accordance with relevant regulations. The disposal has to be classified into "untreated waste." Chemical additives, processing or other changes may cause the waste disposal information in this safety data sheet to become incomplete or inapplicable.

14. Transport Information

International No specific regulations
Shipping Regulations
UN No. -
Domestic Shipping General regulations are fine.
Regulations
Specific Shipping None
Methods and
Attentions

15. Regulatory Information

Applicable Regulations of the Labor Safety and Health Act
Regulations Regulations Governing Road Traffic Safety

16. Other Information

References

Prepare Organization

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Preparer

Job Title

Signature Dr. J. J. Lay

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