



Safety data sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Printing date: 05.31.2016

Revision date: 05.31.2016

Trade name: Root Maker

SECTION 1: Identification of the substance/mixture and of the company undertaking

1.1. Product identifier

Trade name: Root Maker

CAS no.: Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation: Mold growth inhibitor in fermented hay.

1.3. Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

Organic Laboratories, Inc.

5520 Glades Cut-Off Road

Fort Pierce, FL 34981

(772) 286 5581

info@yourplantdoctor.com

1.4. Emergency telephone number:

ChemTel Inc.

(800) 255 3924, +1 (813) 248 0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

a) Classification according to Regulation (EC) No 1272/2008

The product is not classified as hazardous according to the Globally Harmonized System (GHS)

The product is not classified as hazardous according to the CLP regulation.

b) Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

Additional information:

Cero (0) percent of the mixture consists of the component(s) of unknown toxicity

2.2. Label Elements

Labelling according to Regulation (EC) No 1272/2008:

This product does not have a classification according to the CLP regulation.

Hazard pictograms:

Not regulated.

Signal word:

Not regulated

Hazard-determining components of labelling:

None

Hazard statements:

Not regulated

Precautionary statements:

Not regulated

Hazard description:

2.3. Other hazards

Results of PBT and vPvB assessment:

PBT:

PBT assessment has not been performed

vPvB:

vPvB assessment has not been performed



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SECTION 3: Composition/information in ingredients

3.1. Mixtures

Description: Mixtures of substances listed below with nonhazardous additions.

Component	Cas No.	ECHA EC Number
Lactobacillus ferment	68333-16-4	N/A
Lactic acid	50-21-5	201-196-2
Ethylenediaminetetraacetic acid iron(III) sodium salt	15708-41-5	239-802-2

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: If in doubt, seek medical advice.

After inhalation: Fresh air and rest. Get medical attention if any discomfort continues.

After skin contact: Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

After eye contact: Immediately flush with plenty of water for up to 15 minutes. If worn, remove any contact lenses and open eyes wide apart. By prolonged rinsing, use tepid warm water to avoid damage to the eye. Contact physician if discomfort continues.

After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

4.2. Most important symptoms and effects, both acute and delayed

Treat Symptomatically. The product may irritate the respiratory system and can cause itching, burning and coughing. Ingestion may cause discomfort. Inhalation: Prolonged or repeated exposure can cause dizziness.

Skin contact: Prolonged or repeated contact may cause irritation. Eye contact: Prolonged or repeated contact may cause irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No specific treatment required, see section 4.1.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing agents:

Water, dry-powder or carbon dioxide (CO₂).

For safety reasons unsuitable extinguishing agents:

None known

5.2. Special hazards arising from the substance or mixture:

Fire and explosion hazards:

The product is not classified as flammable.

Hazardous combustion products:

None known

5.3. Advice for firefighters

Protective equipment:

Use fresh air mask if product is involved in a fire. At evacuation use an approved escape mask, if possible. See also section 8.

Additional information:

Containers close to fire should be removed immediately or cooled with water. May liberate carbon dioxide, carbon monoxide and/or ammonia.



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SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures:** Ensure adequate ventilation. For large spills, wear protective clothing. Particular danger of slipping on leaked/spilled product.
- 6.2. Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- 6.3. Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Pick up mechanically. Dispose contaminated material as waste according to item 13. Wash the contaminated surface with water.
- 6.4. Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling:** Provide adequate ventilation. Use protective equipment as referred in section 8. Avoid spilling, skin and eye contact. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke during work.
- 7.2. Conditions for safe storage, including and incompatibilities:**
Storage: Avoid temperatures above 105°F (41°C) to preserve product efficacy. Keep in tightly sealed container and protect from exposure too light.
Conditions to avoid: Avoid excessive heat, open flames or sources of ignition. Keep away from perchlorate.
Further information about storage conditions: Keep container tightly sealed.
- 7.3. Specific end use(s):** See section 1.2.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1. Control parameters

Other information about threshold limit values: Contains no substances with occupational exposure limit values.

8.2. Exposure controls:

8.3. Personal protective equipment:

General protective and hygienic measures: The usual precautionary are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Avoid contact with eyes.

Respiratory protection: No required under normal conditions of use. For large spills, respiratory protection may be advisable.

Protection of hands: Gloves not required under normal conditions of use. Wear protective gloves to handle contents of damaged or leaking units. The glove material 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.

Material gloves: 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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Wear safety glasses

Body protection: Not required under normal conditions of use.

Limitation and supervision of exposure into the environment: No special requirements.

Risk management measures: No special requirements.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

General Information

Appearance

Form: Liquid
Colour: Dark Brown Greenish

Odour: Slight Kelp odor

Odour threshold: Not available

pH-value: 3.5 – 4.0

Change in condition

Melting point/Melting range: Not available

Boiling point/Boiling range: Not available

Flash point: Not available

Flammability (solid, gaseous): Not applicable

Auto/Self-ignition temperature: Not applicable

Decomposition temperature: Not available

Self-igniting: Not self-ignition product

Danger of explosion: No

Explosion limits:

Lower: Not applicable

Upper: Not applicable

Vapour pressure at 20 °C: Not available

Density at 20 °C: 1.13 SG

Relative density: 9.45 lb./gal (1.13 Kg/L)

Vapour density: Not available

Evaporation rate: Not available

Solubility in Miscibility with water: 100%

Partition coefficient (n-octanol/water): Not available

Viscosity: Not available

Dynamic:

Kinematic:

9.2. Other information: No further relevant information available

SECTION 10: Stability and reactivity

10.1. Reactivity:

None known.

10.2. Chemical stability:

Lactic acid is known to polymerize to a certain extent.

Thermal decomposition / conditions to be avoided:

May liberate carbon dioxide, carbon monoxide and ammonia.

10.3. Possibility of hazardous reactions:

No further relevant information available.

10.4. Conditions to avoid:

No further relevant information available.

10.5. Incompatible materials:

Alkalis.

10.6. Hazardous decomposition products: None under normal conditions. See also section 5.2



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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: (Oral) Rats LD₅₀= > 33,909 mg/Kg

LD/LC50 values relevant for classification:

Primary irritant effect:

on respiratory tract: May be irritating to mucous membranes of the nose and throat. Remove to fresh air.

on the eye: Irritating to the eyes. Flush immediately with running water for 15 minutes, lifting the upper and lower eyelids occasionally. Get medical attention if irritation persists.

on the skin: No irritating effect.

on the digestive tract: May cause discomfort if swallowed. Ingestion of large amounts may cause abdominal pain, nausea, diarrhea and vomiting.

Sensitization: None of the substances mentioned in section 3 is considered to have sensitizing effects according to current labelling rules.

Subacute to chronic toxicity:

Additional toxicological information: The product is not subject to classification according to the calculation method of the General EU classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

Acute effects (acute toxicity, irritation and corrosivity): From product as supplied: None.

Repeated dose toxicity: No further relevant information available.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity: No further information available.

12.2. Persistence and degradability: The product is biodegradable.

12.3. Bio-accumulative potential: The product will not bio-accumulate.

12.4. Mobility in soil: The water is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT: PBT assessment has not been performed.

vPvB: vPvB assessment has not been performed.

12.6. Other adverse effects: None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendation: Collect in marked containers and deliver to approved depot. The waste code (EWC-Code) is intended as a guide. The user must select a code if the use differs from the one mentioned above.

13.2. Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

Recommend cleansing agents: Water.

Recommended procedure: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.



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SECTION 14: Transport information

- 14.1. UN-Number (DOT, ADR, AND, IMDG, IATA): Not regulated
- 14.2. UN proper shipping name (DOT, ADR, AND, IMDG, IATA): Not regulated
- 14.3. Transport hazard class(es) (DOT, ADR, AND, IMDG, IATA): Not regulated
- 14.4. Packing group (DOT, ADR, AND, IMDG, IATA): Not regulated
- 14.5. Environmental hazards (marine pollutant): No
- 14.6. Special precautions for user: Not applicable
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable
UN "Model Regulation": Not applicable

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Carcinogenic Categories**
 - IARC (International Agency for Research on Cancer)**
None of the ingredients are listed.
 - TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients are listed.
 - Other regulations, limitations and prohibitive regulations**
 - Substances of very high concern (SVHC) according to REACH, Article 57**
None of the ingredients are listed.
- 15.2. Chemical safety assessment: Has not been carried out for this product.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
DOT: US Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
PNEC: Predicted No-Effect Concentration (REACH)
vPvB: very Persistent and very Bioaccumulative.



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Sources

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