

T-MO - TERRA-Microorganisms

Product Specification

T-MO is a liquid that contains microorganisms (soil bacteria), used in agriculture.

T-MO does not contain any fertilising substances such as phosphorus, nitrogen and potassium.

The aerobic soil bacteria promotes the supply of the plant with nitrogen, phosphorus and potassium by the conversion of atmospheric nitrogen as well as phosphorus and potassium-containing compounds in the soil.

Procedure:

Our procedure is based on the transformation from anaerobic into aerobic processes.

Anaerobic processes are putrefaction processes and are always accompanied by unpleasant, pungent and acrid odors, leachate, diseases and "contaminated environment".

This is due to the fact that during the transformation process of organic matter oxygen is being consumed instead of being build.

This leads primarily to degassing and the formation of hydrogen sulfide, which spreads the typical foul odor of rotten eggs.

The transformation from anaerobic into aerobic conditions does not only result in reduced smells and avoidance of odors, but also leads to a valuable product:

Humus - a substrate of new life which systematically multiplies and increases itself from freshly formed bacterial protein.

The process is dominated by the production of oxygen and accompanied by the smell of forest soil, once the organic substance reached the state of aerobic condition (composting).

The resulting compost is no longer harmful to the soil, but activates and builds up soil life again.

Thus a constant rehabilitation of soil fertility and its regenerative powers can be ensured.

Application: Concentrate 1:10
1 liter utility solution for approx. 50 m² ground area / stable area
1 liter utility solution for approx. 20 m³ manure (chicken)

Customs Tariff Number: 30029050

The product is based on microorganisms and thus a soil additive. As a result, it does not fulfill conditions of a fertilizer according to Chap. 31 of cust. tariff.

T-Mo

TERRA- Microorganisms - MSDS

Section 1 Product Description

Product Name: **TERRA – Microorganisms - „T-MO“**

Recommended Uses: Waste and Wastewater Treatment, Bioremediation,
Odor Control

Synonyms: Microbial Inoculant, Microbes, Deodorizer

Supplier by: **TERRA-SYSTEM GmbH.**

Untergroßau 178

A-8261 Sinalbelkirchen

AUSTRIA

(+43) 3118-5110

www.terra-3000.com

Section 2 Hazard Identification

This section identifies the hazards of the chemical presented on the MSDS and the appropriate warning information associated with those hazards.

Pictograms: None exist for Non-hazardous materials

Hazard Rating: Health: 0 Normal Material

Fire: 0 Will not burn

Reactivity: 0 Stable

No hazardous ingredients present; not hazardous to humans, animals or plants.

GHS Classification:

No classification exists for microorganisms

Other Safety Precautions: None necessary.

Section 3 Composition / Information on Ingredients

Chemical Name CAS#

Water 7732-18-5

Lactic Acid Bacteria Not Classified

Yeast Not Classified

Photosynthetic Bacteria Not Classified

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In cases of inhalation, remove to fresh air

Eyes: In case of contact with eyes, rinse with water for 10 seconds.

Skin Contact: Rinse with clean water.

Ingestion: If swallowed, drink some fresh water.

Section 5 Firefighting Procedures

Extinguishing Media: Material will not combust.

Fire Fighting Methods and Protection: Same precautions shall be taken as for fighting a fire of water.

Fire and/or Explosion Hazards: None

Hazardous Combustion Products: None

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Floors: Mop up with fresh water, sewer disposal

Waste Disposal Method: Sewer disposal. Material is biodegradable, all natural organic ingredients, Non-GMO

Soil: Rinse area with water.

Section 7 Handling and Storage

Handling: Pour material with spigot, siphon, or dosage pumps. Material digests biological matter

(fats, oils, grease). Avoid contact with these materials if you don't want them digested.

Storage: Store at temperatures between (40 and 120° F) Do not freeze.

Keep container closed and out of direct sunlight.

Storage Code: Green. General Chemical Storage.

Section 8 Protection Information

Respiratory Protection: None

Ventilation: None

Protective Gloves: Optional

Eye Protection: Safety glasses optional

Protective Clothing: None

Work Practices: Clean up spills immediately; floor will be slick

Section 9 Physical Data

Formula: Proprietary Vapor Pressure: N/D
Molecular Weight: Evaporation Rate: Equal to water
Appearance: Brown liquid Vapor Density (Air=1) 0.804 g/L
Odor: Mild Specific Gravity: 1.2 (25°C)
pH: 3.5 Solubility in Water: Soluble
Melting Point: N/A Log Pow (calculated): Not known
Boiling Point: >100 °C Autoignition Temperature: 536°C
Flash Point: None Viscosity: Same as water
Flammable Limits in Air: N/A % Volatile by Volume: 0

Section 10 Reactivity Data

Reactivity: Not reactive under normal conditions.
Chemical Stability: Stable
Incompatible Materials: None, non-reactive
Hazardous Decomposition Products: None
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry: Inhalation and ingestion
Symptoms (Acute): Coughing, abdominal discomfort (gas pain), loose stool
Displayed Effects: No long-term effects.

Acute Toxicity:

Chemical Name CAS Number Oral LD50 Dermal LD50 Inhalation LD50
Water 7732-18-5 Oral LD50 Rat 90000 mg/kg
Lactic Acid Bacteria Not Classified
Yeast Not Classified
Photosynthetic Bacteria Not Classified

Carcinogenicity:

CAS Number IARC NTP OSHA
Water 7732-18-5 Not Listed Not Listed Not Listed
Lactic Acid Bacteria Not Classified Not Listed Not Listed Not Listed
Yeast Not Classified Not Listed Not Listed Not Listed
Photosynthetic Bacteria Not Classified Not Listed Not Listed Not Listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect)
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects
Target Organ Effects:
Acute: No evidence of acute effects on organs.
Chronic: No evidence of effects on the eyes.

Section 12 Ecological Data

Overview: No ecological hazards known at any concentration.

Mobility: This material is expected to be moderately mobile in soils.

It absorbs into most soil types.

Persistence: 100% Biodegradable

Bioaccumulation: Bioaccumulation is not expected or occur.

Degradability: Biodegrades quickly.

Other Adverse Effects: No Data.

Chemical Name CAS Number Eco Toxicity

Water 7732-18-5 No Data Available

Lactic Acid Bacteria Not Classified No Data Available

Yeast Not Classified No Data Available

Photosynthetic Bacteria Not Classified No Data Available

Section 13 Disposal Information

Disposal Methods: Either use old or expired product in compost or pour down a common drain.

Water Disposal Code(s): This is an unregulated material.

Section 14 Transport Information

Ground –DOT Proper Shipping Name AIR IATA Proper Shipping Name:

Section 15 Regulatory Information

TSCA Status: Not on Toxic Substances Lists

Section 16 Additional Information

Revised 5/31/2017

This [safety data sheet](#) had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.