

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

U.S. Department of Labor


Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Freshwater and Saltwater TLC Products (Liquid Based Bacterial Suspension) (Includes the following brand-name formulations: StartSmart Complete, StartSmart, PondPerfect, Farm Pond Treatment, PitMaster, OdorMaster, TLC for Aquariums, TLC for Ponds, SAT for Aquariums, SAT for Ponds, Septic Medic. All formulations are based on the ingredients and bacterial species disclosed herein. Exact quantity and ratios of these non-hazardous, non-toxic ingredients are proprietary)

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's name	Emergency Telephone Number 216-472-3030
TLC Products. P.O. Box 45301 Westlake, OH 44145. USA.	Telephone Number for Information 216-472-3031
	Date Prepared August 13, 2012
Emergency Contact Person: John M. Wong, Preparer of Document	Signature of Preparer (optional) 

Section II. A. Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
None				

Section II. B. Other Ingredients / Identity Information

Live Bacterial Ingredients. All bacteria listed below are classified as Biosafety Level 1 by the American Type Culture Collection. The specific ATCC numerical identification for each bacterial species is shown (ATCC Number). These bacteria are ubiquitous (found everywhere in the world) and do not pose danger.

Bacillus licheniformis, ATCC 12759
Bacillus amyloliquefaciens, ATCC 23842
Bacillus subtilis, ATCC 29056
Pseudomonas stutzeri, ATCC 11607
Nitrobacter winogradskyi, ATCC 25391
Nitrosomonas europaea, ATCC 25978

The listed bacteria are each found in all Liquid-Based Bacterial formulations (listed above). The exact concentration, ratio, and mix of each bacterial species depends on the formulation and is proprietary.

Food Grade Bacterial Nutrients

Food-grade bacterial nutrients remain in solution with the live bacteria, including varying amounts of the following: dipotassium phosphate, ammonium chloride, magnesium sulfate, sodium chloride, sodium bicarbonate, sodium citrate, glucose, Xanthan Gum, gelatin protein, autolysed yeast extract, and water.

The listed nutrients are each found in all Liquid-Based Bacterial Suspensions (listed above). The exact amount and ratios of each nutrient depends on the formulation and is proprietary.

Section III—Physical/Chemical Characteristics

Boiling Point	100° Celsius		Specific Gravity (H ₂ O = 1)	1.01 to 1.035	
Vapor Pressure (mm Hg)	H ₂ O		Melting Point	N/A	
Vapor Density (AIR = 1)	H ₂ O		Evaporation Rate (Butyl Acetate = 1)	H ₂ O	
Solubility in Water	N/A				

Appearance and Odor Light brown, turbid suspension aqueous. Musty odor.

Section IV—Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	N/A	LEL	N/A	UEL	N/A
Extinguishing Media	N/A						
Special Fire Fighting Procedures	N/A						
Unusual Fire and Explosion Hazards	N/A						

(Reproduce locally)

OSHA 174 Sept. 1985

Section V—Reactivity Data

Stability			Conditions to Avoid	No known conditions to avoid.
	Stable		Conditions to Avoid	Completely stable. Will not polymerize, or undergo other reactions.
Incompatibility	No known incompatibilities with other compounds or chemicals.			
Hazardous Decomposition or Byproducts	Will not decompose.			
Hazardous Polymerization	May Occur		Conditions to Avoid	
	Will Not Occur		Conditions to Avoid	Polymerization will not occur.

Section VI—Health Hazard Data

Route(s) of Entry	Inhalation?	N/A	Skin?	Avoid contact with open wounds.	Ingestion?	Do not ingest.	
Health Hazards	Ingestion may cause diarrhea.						
Carcinogenicity	None	NTP?	N/A	IARC Monographs?	N/A	OSHA Regulated?	N/A
Signs and Symptoms of Exposure	None, N/A						
Medical Conditions	Generally Aggravated by Exposure none known						
Emergency and First Aid Procedures	Wash eyes with water for 10 minutes if accidentally splashed into eyes.						

Section VII—Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled Spilled product may be put into drain or sewer or toilet. Rinse area briefly with water.

Waste Disposal Method Dispose down drain.

Precautions to Be Taken in Handling and Storing Use of rubber gloves and eye shield recommended. Do not ingest. Do not permit contact with open wounds.

Other Precautions None required.

Section VII—Control Measures

Respiratory Protection Not necessary

Ventilation	Local Exhaust	N/A	Special
	Mechanical	N/A	Other

Protective Gloves Latex or rubber gloves recommended. Eye Protection Eye goggles or face shield recommended.

Other Protective Clothing or Equipment None required

Work/Hygienic Practices If contact with skin occurs wash affected area with soap and water.
