Safety Data Sheet: LIQUID CERTI-ZYME 5 PLUS

Supercedes Date 01/07/2013 **Issuing Date** 04/11/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name LIQUID CERTI-ZYME 5 PLUS
Recommended use Flow improver Use in drains
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 0741
Chemical nature bacteria suspension
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Tan - Cream **Physical State** Liquid **Odor** Citrus

GHS
Classification
Physical Hazards
None
Health Hazard
None
Other hazards
None

Labeling
Signal Word
Not classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Sodium chloride	7647-14-5	3-7
Cocamidopropyl betaine	61789-40-0	1-5
Bacillus species	NOT APPLICABLE	0.1-1

4. FIRST AID MEASURES

General advice Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.
Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin Contact Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.
Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.
Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash **Method** Not applicable
Flammability Limits in Air % Not applicable. **Upper** No data available **Lower** No data available
Suitable Extinguishing Media
Water spray. Foam. Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards arising from the chemical
Material can create slippery conditions.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	**Health** 1	**Flammability** 1	**Instability** 0
HMIS	**Health** 1	**Flammability** 1	**Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental Precautions No special environmental precautions required.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not freeze.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium chloride	No data available	5 mg/m^3 PNOR (as solid)	No data available
Cocamidopropyl betaine	No data available	No data available	No data available
Bacillus species	No data available	No data available	No data available

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin Protection For prolonged or repeated contact, use protective gloves with appropriate chemical resistance.

Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Slight Viscous
Color	Tan - Cream	**Odor**	Citrus
Odor Threshold	Not applicable	**Appearance**	Opaque
pH	9	**Specific Gravity**	1.027
Evaporation Rate	0.55 (Butyl acetate=1)	**Percent Volatile (Volume)**	93.1
VOC Content (%)	0.4	**VOC Content (g/L)**	4
Vapor Pressure	17.59 mmHg @ 70°F	**Vapor Density**	0.6 (Air = 1.0)
Solubility	Moderately soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	> 212 °F / 100 °C	**Flammability (solid, gas)**	No data available
Flash Point	Does not flash	**Method**	Not applicable
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Not applicable.	**Upper** No data available **Lower** No data available	

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.

Conditions to Avoid Extremes of temperature and direct sunlight, Do not freeze.

Incompatible Products Strong oxidizing agents, Reducing agents, Chlorine-based bleaching agents, Strong acids and strong bases.

Hazardous Decomposition Products Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Ammonia.

Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50 61,246.73
Dermal LD50 248,082.07
Inhalation LC50
Gas No information available
Mist 260.49
Vapor 260.49

Principle Route of Exposure Skin contact, Eye contact, Inhalation.
Primary Routes of Entry None known
Acute Effects
Eyes Causes eye irritation.
Skin May cause skin irritation. While the bacteria in this product are nonpathogenic, contact with open sores or cuts can cause opportunistic infections in immuno-suppressed Individuals.
Inhalation May cause irritation of respiratory tract.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Toxicity Kidney injury may occur.
Target Organ Effects Kidney
Aggravated Medical Conditions Skin disorders, Respiratory disorders, Kidney disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium chloride	= 3 g/kg (Rat)	> 10 g/kg (Rabbit)	> 42 g/m^3 (Rat) 1 h	no data available	no data available
Cocamidopropyl betaine	= 4900 mg/kg (Rat)	no data available	no data available	no data available	no data available
Bacillus species	no data available	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium chloride	no data available	no data available	no data available	no data available	kidney
Cocamidopropyl betaine	no data available	no data available	no data available	no data available	no data available
Bacillus species	no data available	no data available	no data available	no data available	no data available

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium chloride	not applicable	not applicable	not applicable	not applicable	not applicable
Cocamidopropyl betaine	not applicable	not applicable	not applicable	not applicable	not applicable
Bacillus species	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Sodium chloride	no data available	LC50 5560 - 6080 mg/L Lepomis macrochirus 96 h LC50 = 12946 mg/L Lepomis macrochirus 96 h LC50 6020 - 7070 mg/L Pimephales promelas 96 h LC50 = 7050 mg/L Pimephales promelas 96 h LC50 6420 - 6700 mg/L Pimephales promelas 96 h LC50 4747 - 7824 mg/L Oncorhynchus mykiss 96 h	no data available	EC50= 1000 mg/L 48 h EC50 340.7 - 469.2 mg/L 48 h	N/A
Cocamidopropyl betaine	EC50 1.0 - 10.0 mg/L Desmodesmus subspicatus 72 h EC50 = 0.55 mg/L Desmodesmus subspicatus 96 h	LC50 1.0 - 10.0 mg/L Brachydanio rerio 96 h LC50 = 2 mg/L Brachydanio rerio 96 h	no data available	EC50= 6.5 mg/L 48 h	N/A
Bacillus species	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies
U.S. Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium chloride	Not applicable	Not applicable
Cocamidopropyl betaine	Not applicable	Not applicable
Bacillus species	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Rachael Mohochi
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Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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