

Safety Data Sheet: CERTI-ZYME

Supersedes Date 12/07/2011

Issuing Date 12/20/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CERTI-ZYME
Recommended use Cleaning agent
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 4403
Chemical nature bacteria mixture
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Tan

Physical State Solid

Odor Mild Earthy

GHS

Classification

Physical Hazards

None

Health Hazard

Serious Eye Damage/Eye Irritation

Category 2B

Other hazards

None

Labeling

Signal Word

WARNING

Hazard Statements

H320 - Causes eye irritation

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists, get medical attention.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Sodium bicarbonate	144-55-8	5-10
Disodium phosphate, anhydrous	7558-79-4	3-7
Urea	57-13-6	3-7
Monosodium phosphate, anhydrous	7558-80-7	1-5
Sodium chloride	7647-14-5	1-5
Sodium thiosulfate pentahydrate	10102-17-7	1-5
Bacillus species	NOT APPLICABLE	0.1-1
Lipase, triacylglycerol	9001-62-1	<0.1

4. FIRST AID MEASURES

General advice

Avoid contact with skin, eyes and clothing. Avoid breathing dust.

Eye Contact

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Skin Contact

Wipe up with absorbent material (e.g. cloth, fleece). Wash off with soap and plenty of water. Get medical attention if irritation develops and persists. Remove and wash contaminated clothing before re-use.

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 irritation develops and persists.

Notes to physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flash Point

Does not flash

Method

Not applicable

Flammability Limits in Air % Dust explosion properties.

Upper No data available

Lower No data available

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Foam. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Dust can form an explosive mixture in air.

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. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so.

Environmental Precautions

No special environmental precautions required.

Methods for Containment

Cover powder spill with plastic sheet or tarp to minimize spreading.

Methods for Cleaning Up

Pick up and arrange disposal without creating dust.

Neutralizing Agent

Not applicable.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes and clothing. Avoid breathing dust.

Storage

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Storage Temperature

Minimum 35 °F / 2 °C

Maximum 100 °F / 38 °C

Storage Conditions

Indoor X

Outdoor

Heated

Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium bicarbonate	No data available	5 mg/m ³ PNOR (as solid)	No data available
Disodium phosphate, anhydrous	No data available	5 mg/m ³ PNOR (as solid)	No data available
Urea	No data available	No data available	No data available
Monosodium phosphate, anhydrous	No data available	5 mg/m ³ PNOR (as solid)	No data available
Sodium chloride	No data available	5 mg/m ³ PNOR (as solid)	No data available
Sodium thiosulfate pentahydrate	No data available	No data available	No data available
Bacillus species	No data available	No data available	No data available
Lipase, triacylglycerol	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 inadequate ventilation wear respiratory protection. 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

Solid

Viscosity

Granular

Color

Tan

Odor

Mild Earthy

Odor Threshold

Not applicable

Appearance

Opaque

pH

Not applicable

Specific Gravity

0.49

Evaporation Rate

0 (Butyl acetate=1)

Percent Volatile (Volume)

0

VOC Content (%)

0

VOC Content (g/L)

0

Vapor Pressure

0 mmHg @ 70°F

Vapor Density

0 (Air = 1.0)

Solubility

Appreciable

n-Octanol/Water Partition

No data available

Melting Point/Range

No data available

Decomposition Temperature

No data available

Boiling Point/Range

Not applicable

Flammability (solid, gas)

No data available

Flash Point

Does not flash

Method

Not applicable

Autoignition Temperature

No information available.

Upper No data available **Lower** No data available

Flammability Limits in Air %

Dust explosion properties.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	None known
Incompatible Products	Strong oxidizing agents, Strong acids, Strong bases.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Ammonia, Sulfur oxides, Sodium oxides.
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	6,237.16
Dermal LD50	9,541.63
Inhalation LC50	
Gas	No information available
Mist	12.55
Vapor	12.55

Principle Route of Exposure	Skin contact, Eye contact, Inhalation.
Primary Routes of Entry	Inhalation
Acute Effects	
Eyes	Causes eye irritation.
Skin	May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Toxicity	Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Lung edema. Cyanosis. Risk of infection of the lung after prolonged inhalation of dust particles. Central nervous system, Lungs, Heart, Kidney.
Target Organ Effects	Skin disorders, Respiratory disorders, Kidney disorders, Neurological disorders, Heart disease.
Aggravated Medical Conditions	

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium bicarbonate	= 4220 mg/kg (Rat)	no data available	no data available	no data available	no data available
Disodium phosphate, anhydrous	no data available	no data available	no data available	no data available	no data available
Urea	14,300-15,000 mg/kg (rat)	no data available	no data available	no data available	no data available
Monosodium phosphate, anhydrous	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	no data available	no data available	no data available
Sodium chloride	= 3 g/kg (Rat)	no data available	> 42 g/m ³ (Rat) 1 h	no data available	no data available
Sodium thiosulfate pentahydrate	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
Lipase, triacylglycerol	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 bicarbonate	no data available	no data available	no data available	no data available	no data available
Disodium phosphate, anhydrous	no data available	no data available	no data available	no data available	no data available
Urea	no data available	no data available	no data available	no data available	no data available
Monosodium phosphate, anhydrous	no data available	no data available	no data available	no data available	CNS, heart, kidney
Sodium chloride	no data available	no data available	no data available	no data available	kidney
Sodium thiosulfate pentahydrate	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
Lipase, triacylglycerol	no data available	Respiratory sensitizer	no data available	no data available	Lungs

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium bicarbonate	not applicable	not applicable	not applicable	not applicable	not applicable
Disodium phosphate, anhydrous	not applicable	not applicable	not applicable	not applicable	not applicable
Urea	not applicable	not applicable	not applicable	not applicable	not applicable
Monosodium phosphate, anhydrous	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium chloride	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium thiosulfate	not applicable	not applicable	not applicable	not applicable	not applicable

pentahydrate					
Bacillus species	not applicable	not applicable	not applicable	not applicable	not applicable
Lipase, triacylglycerol	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 bicarbonate	EC50 = 650 mg/L Nitzschia linearis 120 h	LC50 8250 - 9000 mg/L Lepomis macrochirus 96 h	no data available	EC50= 2350 mg/L 48 h	N/A
Disodium phosphate, anhydrous	no data available	no data available	no data available	no data available	N/A
Urea	no data available	LC50 16200 - 18300 mg/L Poecilia reticulata 96 h	EC50 = 23914 mg/L 5 min	EC50> 10000 mg/L 24 h EC50= 3910 mg/L 48 h	-1.59
Monosodium phosphate, anhydrous	no data available	no data available	no data available	no data available	N/A
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
Sodium thiosulfate pentahydrate	no data available	no data available	no data available	no data available	N/A
Bacillus species	no data available	no data available	no data available	no data available	N/A
Lipase, triacylglycerol	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

Does not Comply

DSL

Does not Comply

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 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	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium bicarbonate	Not applicable	Not applicable
Disodium phosphate, anhydrous	5000 lb	Not applicable
Urea	Not applicable	Not applicable
Monosodium phosphate, anhydrous	Not applicable	Not applicable
Sodium chloride	Not applicable	Not applicable
Sodium thiosulfate pentahydrate	Not applicable	Not applicable
Bacillus species	Not applicable	Not applicable
Lipase, triacylglycerol	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Ana Santiago
Supersedes Date 12/07/2011
Issuing Date 12/20/2013
Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

CERTIFIED LABS, DIV. OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.