

Safety Data Sheet: DR ZYME

Supersedes Date 07/15/2011

Issuing Date 04/25/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DR ZYME
Recommended use Cleaning agent
Information on Manufacturer
CHEMSEARCH DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code 0316
Chemical nature Aqueous mixture
Emergency Telephone Number

Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color White - Tan

Physical State Liquid

Odor Cherry - Vanilla

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
Bacillus species	-	< 0.1

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 > 201 °F / > 94 °C

Method Seta closed cup

Flammability Limits in Air % Not applicable.

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

Suitable Extinguishing Media

Water spray. Foam. Carbon dioxide (CO2). Dry chemical. 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	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
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.			
Storage Temperature	Minimum	33 °F / 1 °C	Maximum	104 °F / 40 °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
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 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	Liquid	Viscosity	Non viscous
Color	White - Tan	Odor	Cherry - Vanilla
Odor Threshold	Not applicable	Appearance	Opaque
pH	9.1	Specific Gravity	8.677
Evaporation Rate	0.59 (Butyl acetate=1)	Percent Volatile (Volume)	97.6
VOC Content (%)	1.2	VOC Content (g/L)	105.7
Vapor Pressure	1.99 mmHg @ 70°F	Vapor Density	0.6 (Air = 1.0)
Solubility	Completely soluble	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition Temperature	No data available
Boiling Point/Range	> 210 °F / 99 °C	Flammability (solid, gas)	No data available
Flash Point	> 201 °F / > 94 °C	Method	Seta closed cup
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	None known
Incompatible Products	Strong oxidizing agents, Aldehydes, Acids, Bases.
Hazardous Decomposition Products	Carbon 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	60,000.72
Dermal LD50	200,202.40
Inhalation LC50	
Gas	No information available
Mist	210.21
Vapor	No information available

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	None known.
Target Organ Effects	None known
Aggravated Medical Conditions	Skin disorders, Respiratory 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
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
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
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
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
Bacillus species	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Angela Hutson
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 Reason for Revision No information available.
 Glossary No information available.
 List of References. No information available.

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