#### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Code: Product Name: Company Name: CHEMXW-001-BULK CarbonZyme ChemxWorks 8340 Camino Santa Fe, Suite D San Diego, CA 92121 CHEMTREC

Phone Number: +1 (844)322-7266

Emergency Contact:

+1 (800)424-9300

2. HAZARDS IDENTIFICATION

#### Serious Eye Damage/Eye Irritation, Category 2B Acute Toxicity: Oral, Category 4 Skin Corrosion/Irritation, Category 3



GHS Signal Word:	Warning
GHS Hazard Phrases:	H302 - Harmful if swallowed. H316 - Causes mild skin irritation.
	H320 - Causes eye irritation.
GHS Precaution Phrases:	P264 - Wash hands thoroughly after handling.
	P280 - Wear protective gloves/eye protection.
	P102 - Keep out of reach of children.
	P103 - Read label before use.
GHS Response Phrases:	P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P315 - Get immediate medical advice/attention.
	P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.
	P302 - IF ON SKIN: P352 - Wash with plenty of water. P332+313 - If skin irritation occurs, get medical advice/attention.
GHS Storage and Disposal Phrases:	P501 - Dispose of contents/container in accordance to local, state and federal regulations.
Potential Health Effects (Acute and Chronic):	
Skin Contact:	May cause skin irritation. Repeated or prolonged exposure may cause drying of the skin.
Eye Contact:	May cause eye irritation. May cause redness.
Ingestion:	May be harmful if swallowed. May cause gastrointestinal irritation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
497-19-8	Sodium carbonate	<40.0 %
6834-92-0	Sodium metasilicate	<20.0 %
NA	Phosphate	<15.0 %
NA	Surfactant	< 5.0 %
5329-14-6	Sulfamic acid	<15.0 %

	4. FIRST AID MEASURES
Emergency and First Aid Procedures:	
In Case of Skin Contact:	Flush skin with plenty of water. If skin irritation occurs, get medical advice/attention.
In Case of Eye Contact:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
In Case of Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.
Note to Physician:	Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.
	5. FIRE FIGHTING MEASURES
Flash Pt:	NA
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	NA
Suitable Extinguishing Media	a:Use water fog, dry chemical, carbon dioxide, or alcohol-resistant foam.
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Flammable Properties and Hazards:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide.
Hazardous Combustion Products:	No data available.
	6. ACCIDENTAL RELEASE MEASURES
Protective Precautions, Protective Equipment and Emergency Procedures:	Use proper personal protective equipment as indicated in Section 8.
<b>Environmental Precautions:</b>	Observe all federal, state, and local environmental regulations.
Steps To Be Taken In Case Material Is Released Or Spilled:	Sweep up, then place into a suitable container for disposal. Avoid contact with eyes, skin, and clothing. Avoid generating dusty conditions. Ensure adequate ventilation.
	7. HANDLING AND STORAGE
Precautions To Be Taken in Handling:	Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use with adequate ventilation.

# Precautions To Be Taken in<br/>Storing:Do not store in direct sunlight. Protect containers against damage. Keep container tightly<br/>closed in a dry and well-ventilated place.

**Other Precautions:** 

Handle in accordance with good industrial hygiene and safety practice.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
497-19-8	Sodium carbonate	No data.	No data.	No data.
6834-92-0	Sodium metasilicate	No data.	No data.	No data.
NA	Phosphate	No data.	No data.	No data.
NA	Surfactant	No data.	No data.	No data.
5329-14-6	Sulfamic acid	No data.	No data.	No data.

Respiratory Equipment	No special respiratory protection equipment is required with normal use.
(Specify Type):	
Eye Protection:	Safety glasses.
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene
	gloves.
Other Protective Clothing:	No data available.
Engineering Controls	No data available.
(Ventilation etc.):	
Work/Hygienic/Maintenance	Handle in accordance with good industrial hygiene and safety practice.
Practices:	
9.	PHYSICAL AND CHEMICAL PROPERTIES
Physical States:	[]Gas [X]Liquid []Solid
Appearance and Odor:	White.
	Free flowing granules.
pH:	11 - 12
Melting Point:	NA
Boiling Point:	NA
Flash Pt:	NA
Evaporation Rate:	NA
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or	NA
mm Hg):	
Vapor Density (vs. Air = 1):	NA
Specific Gravity (Water = 1):	No data.
Solubility in Water:	No data.
Saturated Vapor	NA
Concentration:	
<b>Octanol/Water Partition</b>	No data.
Coefficient:	
Autoignition Pt:	NA
Decomposition Temperature	: NA
Viscosity:	NA
	10. STABILITY AND REACTIVITY
Reactivity:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide.
Stability:	Unstable [ ] Stable [ X ]
Conditions To Avoid -	Incompatible materials, High temperatures, Light.
Instability:	
Incompatibility - Materials To Avoid:	Strong acids.
Hazardous Decomposition or Byproducts:	r No data available.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [ X ]

Conditions To Avoid -

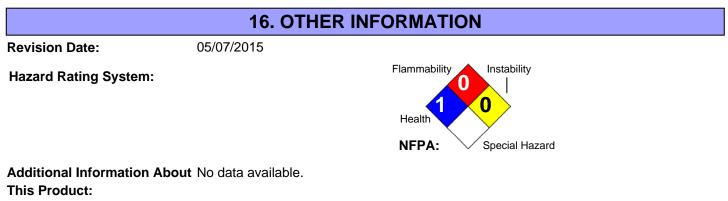
Hazardous Reactions:

No data available.

	11. TOXICOLOGICAL INFORMATION
Toxicological Information:	Epidemiology: No information found. Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: No information available. Neurotoxicity: Acute toxicity. No data available. Respiratory or skin sensitization: No information available.
Irritation or Corrosion:	Other Studies: CAS# 497-19-8: Acute toxicity, LD50, Oral, Rat, 4090 mg/kg
	Other Studies: CAS# 497-19-8: Standard Draize Test, Skin, Species: Rabbit, 500.0 mg, 24H Standard Draize Test, Eyes, Species: Rabbit, 100.0 mg, 24H
	Other Studies: CAS# 5329-14-6: Acute toxicity, LD50, Oral, Rat, 3160 mg/kg
	Other Studies: CAS# 5329-14-6: Standard Draize Test, Skin, Species: Rabbit, 500 mg, 24H Standard Draize Test, Eyes, Species: Rabbit, 20 mg
	Other Studies: CAS# 6834-92-0: Acute toxicity, LD50, Oral, Rat, 1000 mg/kg
Carcinogenicity/Other Information:	Other Studies: CAS# 6834-92-0: Standard Draize Test, Skin, Species: Rabbit, 250.0 mg, 24H IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
	NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Carcinogenicity:	OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. NTP? No IARC Monographs? No OSHA Regulated? No
	12. ECOLOGICAL INFORMATION
General Ecological Information:	Environmental: No information available. Physical: No information available.
Results of PBT and vPvB assessment:	CAS# 6834-92-0: Sodium metasilicate: LC50, Zebra Danio (Danio rerio), 210.0 MG\L, 96 H. Result: Loss of equilibrium. Other Studies: CAS# 497-19-8: LC50, Water Flea (Daphnia magna), 265,000 ug/L, 48H LC50, Fathead Minnow (Pimephales promelas), 850,000 ug/L, 96H

LC50, Western Mosquitofish (Gambusia affinis), adult(s), 740000 ug/L, 96H

		Other Studies: CAS# 5329-		\ 44000 // 00	
Densistan		LC50, Fathead Minnow (Pi	nephales promelas	s), 14200 ug/l, 96	H
Persistence Degradability		No data available.			
	, ative Potential:	No data available.			
Mobility in S	oil:	No data available.			
		13. DISPOSAL C	ONSIDERAT	IONS	
Waste Dispo	sal Method:	Chemical waste generators must determine whether a discarded chemical is classifie as a hazardous waste. US EPA guidelines for the classification determination are list in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.			determination are listed sult state and local classification.
		14. TRANSPOR	T INFORMA	ΓΙΟΝ	
LAND TRAN	SPORT (US DO	Г):			
	ard Class:	me: Not Regulated.			
		15. REGULATOR			
		15. REGULATOR			
EPA SARA (S	uperfund Amendi	nents and Reauthorization Act			
CAS #	Hazardous Con	ments and Reauthorization Act nponents (Chemical Name)	t of 1986) Lists S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
<b>CAS #</b> 497-19-8	Hazardous Con Sodium carbona	ments and Reauthorization Act nponents (Chemical Name) te	t of 1986) Lists S. 302 (EHS) No	<b>S. 304 RQ</b> No	No
CAS # 497-19-8 6834-92-0	Hazardous Con Sodium carbona Sodium metasili	ments and Reauthorization Act nponents (Chemical Name) te	t <b>of 1986) Lists</b> <b>S. 302 (EHS)</b> No No	<b>S. 304 RQ</b> No No	No
CAS # 497-19-8 6834-92-0 NA	Hazardous Con Sodium carbona Sodium metasili Phosphate	ments and Reauthorization Act nponents (Chemical Name) te	t <b>of 1986) Lists</b> <b>S. 302 (EHS)</b> No No No	<b>S. 304 RQ</b> No No No	No No No
CAS # 497-19-8 6834-92-0 NA NA	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant	ments and Reauthorization Act nponents (Chemical Name) te	t <b>of 1986) Lists</b> <b>S. 302 (EHS)</b> No No No No	<b>S. 304 RQ</b> No No No No	No No No
CAS # 497-19-8 6834-92-0 NA NA 5329-14-6	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant Sulfamic acid	ments and Reauthorization Act nponents (Chemical Name) te cate	t <b>of 1986) Lists</b> <b>S. 302 (EHS)</b> No No No No No	<b>S. 304 RQ</b> No No No No	No No No
CAS # 497-19-8 6834-92-0 NA NA 5329-14-6 CAS #	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant Sulfamic acid Hazardous Con	ments and Reauthorization Act nponents (Chemical Name) tte cate	t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA of	S. 304 RQ No No No No No	No No No No
CAS # 497-19-8 6834-92-0 NA NA 5329-14-6	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant Sulfamic acid	ments and Reauthorization Act nponents (Chemical Name) tte cate	: of 1986) Lists S. 302 (EHS) No No No No Other US EPA of TSCA: Yes - Inve No; MA Oil/Hazt NY Part 597: No;	S. 304 RQ No No No No No r State Lists entory; CA PROP.0 Mat: No; MI CMR, ; PA HSL: No	No No No
CAS # 497-19-8 6834-92-0 NA NA 5329-14-6 CAS # 497-19-8 6834-92-0	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant Sulfamic acid Hazardous Con Sodium carbona	ments and Reauthorization Act nponents (Chemical Name) tte cate	t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA of TSCA: Yes - Inve No; MA Oil/Haz! NY Part 597: No; TSCA: Yes - Inve No; MA Oil/Haz! NY Part 597: No;	S. 304 RQ No No No No No T State Lists entory; CA PROP.0 Mat: No; MI CMR, ; PA HSL: No entory; CA PROP.0 Mat: No; MI CMR, ; PA HSL: No	No No No No No 65: No; CA TAC, Title 8: Part 5: No; NJ EHS: No; 65: No; CA TAC, Title 8: Part 5: No; NJ EHS: No;
CAS # 497-19-8 6834-92-0 NA NA 5329-14-6 CAS # 497-19-8	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant Sulfamic acid Hazardous Con Sodium carbona	ments and Reauthorization Act nponents (Chemical Name) tte cate	s of 1986) Lists S. 302 (EHS) No No No No No Other US EPA of TSCA: Yes - Inve No; MA Oil/Hazt NY Part 597: No; TSCA: Yes - Inve No; MA Oil/Hazt NY Part 597: No; TSCA: No; CA F	S. 304 RQ No No No No No r State Lists entory; CA PROP. Mat: No; MI CMR, ; PA HSL: No entory; CA PROP. Mat: No; MI CMR, ; PA HSL: No PROP.65: No; CA MI CMR, Part 5: N	No No No No No 65: No; CA TAC, Title 8: Part 5: No; NJ EHS: No; 65: No; CA TAC, Title 8:
CAS # 497-19-8 6834-92-0 NA NA 5329-14-6 CAS # 497-19-8 6834-92-0	Hazardous Con Sodium carbona Sodium metasili Phosphate Surfactant Sulfamic acid Hazardous Con Sodium carbona	ments and Reauthorization Act nponents (Chemical Name) tte cate	s of 1986) Lists S. 302 (EHS) No No No No No Other US EPA of TSCA: Yes - Inve No; MA Oil/Hazt NY Part 597: No; TSCA: Yes - Inve No; MA Oil/Hazt NY Part 597: No; TSCA: No; CA F Oil/HazMat: No; 597: No; PA HS TSCA: No; CA F	S. 304 RQ No No No No No No <b>State Lists</b> entory; CA PROP. Mat: No; MI CMR, ; PA HSL: No entory; CA PROP. Mat: No; MI CMR, ; PA HSL: No PROP.65: No; CA MI CMR, Part 5: N CMR, Part 5: N	No No No No No 65: No; CA TAC, Title 8: Part 5: No; NJ EHS: No; 65: No; CA TAC, Title 8: Part 5: No; NJ EHS: No; TAC, Title 8: No; MA



Company Policy or Disclaimer: While ChemxWorks believes the statements set forth herein are accurate as of the date hereof, ChemxWorks makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation, and verification.