1. PRODUCT AND COMPANY IDENTIFICATION

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

2. HAZARDS IDENTIFICATION

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.
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

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>497-19-8</td>
<td>Sodium carbonate</td>
<td>&lt;40.0 %</td>
</tr>
<tr>
<td>6834-92-0</td>
<td>Sodium metasilicate</td>
<td>&lt;20.0 %</td>
</tr>
<tr>
<td>NA</td>
<td>Phosphate</td>
<td>&lt;15.0 %</td>
</tr>
<tr>
<td>NA</td>
<td>Surfactant</td>
<td>&lt; 5.0 %</td>
</tr>
<tr>
<td>5329-14-6</td>
<td>Sulfamic acid</td>
<td>&lt;15.0 %</td>
</tr>
</tbody>
</table>
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: 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.

Environmental Precautions: 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 Storing: Do not store in direct sunlight. Protect containers against damage. Keep container tightly 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

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
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</table>
Respiratory Equipment (Specify Type): No special respiratory protection equipment is required with normal use.

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 (Ventilation etc.): No data available.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice.

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 mm Hg): NA

Vapor Density (vs. Air = 1): NA

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Saturated Vapor Concentration: NA

Octanol/Water Partition Coefficient: No data.

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 - Instability: Incompatible materials, High temperatures, Light.

Incompatibility - Materials To Avoid: Strong acids.

Hazardous Decomposition or Byproducts: 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
- Other Studies: CAS# 6834-92-0:
  - Standard Draize Test, Skin, Species: Rabbit, 250.0 mg, 24H

Carcinogenicity/Other Information:
- 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.
- 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.

Carcinogenicity:
- 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 MgL, 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# 5329-14-6:
LC50, Fathead Minnow (Pimephales promelas), 14200 ug/l, 96 H

Persistence and Degradability:
No data available.

Bioaccumulative Potential:
No data available.

Mobility in Soil:
No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed 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.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
DOT Hazard Class: UN/NA Number:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
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<th>S. 313 (TRI)</th>
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Other US EPA or State Lists

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<th>Hazardous Components (Chemical Name)</th>
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<th>CA TAC</th>
<th>Title 8</th>
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<th>Part 5</th>
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16. OTHER INFORMATION

Revision Date: 05/07/2015

Hazard Rating System:

![Hazard Rating System Diagram]

Additional Information About This Product: No data available.

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.