1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 8500MTP
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 984C
Chemical nature Aqueous solution of alkali salts
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Light orange - Light brown
Physical state liquid
Odor Slight Sweet

GHS
Classification
Physical Hazards
Corrosive to Metals Category 1

Health Hazard
Skin Corrosion/Irritation Category 1
Serious Eye Damage/Eye Irritation Category 1

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H314 - Causes severe skin burns and eye damage
H290 - May be corrosive to metals

Precautionary Statements
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling
P260 - Do not breathe mist
P303 + P361 + P338 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P363 - Wash contaminated clothing before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a physician
P340 + P341 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P342 + P311 - If experiencing respiratory symptoms, call a physician
P406 - Store in a corrosion-resistant container.
P390 - Absorb spillage to prevent damage
P501 - Dispose of contents and container in accordance with applicable local regulations.

12 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>3-7</td>
</tr>
<tr>
<td>Tolytriazole Sodium Salt</td>
<td>64665-57-2</td>
<td>3-7</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

General advice
Do not get in eyes, on skin or on clothing. Do not breathe mist.

Eye Contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin Contact
Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation
Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion
Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Notes to physician
The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed.

5. FIRE-FIGHTING MEASURES

Flash Point
Does not flash

Flammability Limits in Air %: Hydrogen, by reaction with metals.
Upper: 75
Lower: 4

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO2). Foam. Alcohol-resistant foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical
Contact with metals may evolve flammable hydrogen gas. Material can create slippery conditions.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.

NFPA
Health 3
Flammability 0
Instability 0

HMIS
Health 3
Flammability 0
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. Material can create slippery conditions.

Environmental Precautions
Do not flush into surface water or sanitary sewer system.

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
Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling
Do not get in eyes, on skin or on clothing. Do not breathe mist.

Storage
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Storage Temperature
Minimum 40 °F / 4 °C
Maximum 115 °F / 46 °C

Storage Conditions
Indoor X
Outdoor
Heated
Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment

Eye/Face Protection
Tightly fitting safety goggles. Face-shield.

Skin Protection
Wear suitable protective clothing. Impervious gloves.

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

Wear protective gloves/clothing. 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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Light orange - Light brown</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>13.6</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>0.46 (BuAc = 1)</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>0</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>13.73 mmHg @ 70°F</td>
</tr>
<tr>
<td>Solubility</td>
<td>Completely soluble</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Does not flash</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limits in Air %:</td>
<td>Hydrogen, by reaction with metals</td>
</tr>
</tbody>
</table>

Upper: 75 Lower: 4

10. STABILITY AND REACTIVITY

Chemical Stability
Stable. Hazardous polymerization does not occur.

Conditions to Avoid
None known.

Incompatible Products
Strong oxidizing agents, Strong acids, Halogenated hydrocarbon. Contact with metals liberates hydrogen gas.

Decomposition Temperature
No data available

Hazardous Decomposition Products
Carbon oxides, Oxides of phosphorus, Sodium oxides, Sulfur oxides, Zinc oxide fumes. Hydrogen, by reaction with metals.

Possibility of Hazardous Reactions
None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information
No information available.

The following values are calculated based on chapter 3.1 of the GHS document

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
<th>Draize Test</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>no data available</td>
<td>1350 mg/kg (Rabbit)</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Sodium sulfate 7757-82-6</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Chronic Toxicity
Inhaled corrosive substances can lead to a toxic edema of the lungs.

Target Organ Effects
Respiratory system, Skin.

Component Information

Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Mutagenicity</th>
<th>Sensitization</th>
<th>Developmental Toxicity</th>
<th>Reproductive Toxicity</th>
<th>Target Organ Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>Skin, Eyes, Respiratory system</td>
</tr>
</tbody>
</table>

Carcinogenicity
Contains no ingredient listed as a carcinogen.
12. ECOLOGICAL INFORMATION

**Product Information**
No information available.

**Component Information**

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Microtox</th>
<th>Crustacea</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>No information available.</td>
<td>LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h</td>
<td>No information available</td>
<td>No information available</td>
<td>N/A</td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>No information available.</td>
<td>LC50 13500 - 14500 mg/L Pimephales promelas 96 h</td>
<td>LC50 &gt; 6800 mg/L Pimephales promelas 96 h</td>
<td>LC50 3040 - 4380 mg/L Lepomis macrochirus 96 h</td>
<td>LC50 = 13500 mg/L Lepomis macrochirus 96 h</td>
</tr>
</tbody>
</table>

**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**

- **Proper Shipping Name**: Corrosive Liquid, Basic, Inorganic, N.O.S.
- **Hazard Class**: 8
- **UN-No**: UN3266
- **Packing Group**: II
- **Description**: UN3266, Corrosive Liquid, Basic, Inorganic, N.O.S., (Sodium Hydroxide, Sodium Tolytriazole), 8, PG II

**TDG**

- **Proper shipping name**: Corrosive Liquid, Basic, Inorganic, N.O.S.
- **Hazard Class**: 8
- **UN-No**: UN3266
- **Packing Group**: II
- **Description**: UN3266, Corrosive Liquid, Basic, Inorganic, N.O.S., (Sodium Hydroxide, Sodium Tolytriazole), 8, PG II

**ICAO**

- **UN-No**: UN3266
- **Proper Shipping Name**: Corrosive Liquid, Basic, Inorganic, N.O.S.
- **Hazard Class**: 8
- **Packing Group**: II
- **Shipping Description**: UN3266, Corrosive Liquid, Basic, Inorganic, N.O.S., (Sodium Hydroxide, Sodium Tolytriazole), 8, PG II

**IATA**

- **UN-No**: UN3266
- **Proper Shipping Name**: Corrosive Liquid, Basic, Inorganic, N.O.S.
- **Hazard Class**: 8
- **Packing Group**: II
- **ERG-Code**: 8L
- **Shipping Description**: UN3266, Corrosive Liquid, Basic, Inorganic, N.O.S., (Sodium Hydroxide, Sodium Tolytriazole), 8, PG II

**IMDG/IMO**

- **Proper Shipping Name**: Corrosive Liquid, Basic, Inorganic, N.O.S.
- **Hazard Class**: 8
- **UN-No**: UN3266
- **Packing Group**: II
- **EmS No.**: F-A, S-B
- **Description**: UN3266, Corrosive Liquid, Basic, Inorganic, N.O.S., (Sodium Hydroxide, Sodium Tolytriazole), 8, PG II
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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium zincate</td>
<td>12179-14-5</td>
<td>1-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Acute Health Hazard</th>
<th>Chronic Health Hazard</th>
<th>Fire Hazard</th>
<th>Sudden Release of Pressure Hazard</th>
<th>Reactive Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lb</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

Prepared By  Adrienne McKee
Supersedes Date  06/11/2015
Issuing Date  09/25/2015
Reason for Revision  No information available.
Glossary  No information available.
List of References.  No information available.

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