

Safety Data Sheet CHEM-AQUA 11540

Supersedes Date 09/11/2013

Issuing Date 03/06/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 11540
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 002Z
Chemical nature Alkaline Aqueous solution
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless

Physical state Liquid

Odor Odorless

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 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P332 + P313 - If skin irritation occurs, get medical attention.

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.

P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P342 + P311 - If experiencing respiratory symptoms, call a physician.

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.

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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
Sodium hydroxide	1310-73-2	15-40
Potassium hydroxide	1310-58-3	10-30

*The exact percentage (concentration) of composition has been withheld as a trade secret

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 breathing has stopped, apply 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	Method	No data available
Flammability Limits in Air %:	Hydrogen, by reaction with metals.	Upper:	75
		Lower:	4
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). 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 liberates 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 1
HMIS	Health 3	Flammability 0	Instability 1

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	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	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
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	45 °F / 7 °C	Maximum	110 °F / 43 °C
Storage Conditions	Indoor	X	Outdoor	Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	10 mg/m ³ Ceiling: 2 mg/m ³
Potassium hydroxide	Ceiling: 2 mg/m ³	No data available	Ceiling: 2 mg/m ³

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 protective gloves/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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Viscosity	Non viscous
Color	Colorless	Odor	Odorless
Odor Threshold	Not applicable	Appearance	Transparent - Hazy
pH	> 13	Specific Gravity	1.405
Evaporation Rate	0.38 (Butyl acetate=1)	Percent Volatile (Volume)	0
VOC Content (%)	0	VOC Content (g/L)	0
Vapor Pressure	9.97 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	238 °F / 114 °C	Flammability (solid, gas)	No data available
Flash Point	Does not flash	Method	No data available
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Hydrogen, by reaction with metals	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, Acids, Metals, Aldehydes, Halogenated hydrocarbon, Phosphorus compounds.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Sodium oxides, Contact with metals liberates hydrogen gas.
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

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available

Principle Route of Exposure Skin contact, Eye contact, Inhalation.

Primary Routes of Entry None known.

Acute Effects:

Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes skin burns.
Inhalation	Harmful by inhalation. Causes burns.
Ingestion	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May be fatal if swallowed.

Chronic Toxicity

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

Target Organ Effects Skin, Eyes, Respiratory system.

Aggravated Medical Conditions Skin disorders, Respiratory disorders.

Component Information

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Sodium hydroxide 1310-73-2	No data available	= 1350 mg/kg (Rabbit)	No data available	No data available	No data available
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	no data available	No data available	No data available	No data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium hydroxide 1310-73-2	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system
Potassium hydroxide 1310-58-3	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system

Carcinogenicity There are no known carcinogenic chemicals in this product.

12. ECOLOGICAL INFORMATION

Product Information No information available.

Toxicity to fish No data available	Daphnia magna (Water flea) No data available
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Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficient
Sodium hydroxide	No information available.	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	No information available	No information available.	N/A
Potassium hydroxide	No information available.	No information available.	No information available	No information available.	0.83

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 Corrosive liquid, basic, inorganic, n.o.s.(Sodium hydroxide,Potassium hydroxide),8,UN3266,PG II

TDG

Proper shipping name Corrosive liquid, basic, inorganic, n.o.s.
Hazard Class 8
UN-No UN3266
Packing Group II
Description CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(Sodium hydroxide,Potassium hydroxide),8,UN3266,PG II

ICAO

UN-No UN3266
Proper Shipping Name Corrosive liquid, basic, inorganic, n.o.s.*
Hazard Class 8
Packing Group II
Shipping Description Corrosive liquid, basic, inorganic, n.o.s.*(Sodium hydroxide,Potassium hydroxide),8,UN3266,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,Potassium hydroxide),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,Potassium hydroxide),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 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	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium hydroxide	1000 lb	Not applicable
Potassium hydroxide	1000 lb	Not applicable

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS No.	California Prop. 65
Lead	1317-36-8	carcinogen developmental toxicity
Asbestos	1332-21-4	carcinogen
Mercury	7439-97-6	developmental toxicity
Nickel	7440-02-0	carcinogen
Arsenic	7440-38-2	carcinogen
Beryllium	7440-41-7	carcinogen
Cadmium and compounds (as Cd)	7440-43-9	carcinogen
Chromium	7440-47-3	carcinogen developmental toxicity
Cobalt	7440-48-4	carcinogen

16. OTHER INFORMATION

Prepared By	Samantha Purvis
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Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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