Safety Data Sheet: AQUA-SOL

Supercedes Date 09/16/2013 **Issuing Date** 04/11/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name AQUA-SOL
Recommended use Cleaning agent
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 0003
Chemical nature Aqueous surfactant solution
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Yellow - Green **Physical State** Liquid **Odor** Slight

GHS
Classification
Physical Hazards

Substances/mixtures corrosive to metal	Category 1

Health Hazard

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3
Specific target organ systemic toxicity (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H314 - Causes severe skin burns and eye damage
H336 - May cause drowsiness or dizziness
H373 - May cause damage to organs through prolonged or repeated exposure
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.
P271 - Use in a well-ventilated area.
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.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P390 - Absorb spillage to prevent damage
P501 - Dispose of contents and container in accordance with applicable regulations.

4 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
2-Butoxyethanol	111-76-2	1-5

Disodium phosphate, anhydrous	7558-79-4	1-5
Trisodium phosphate	7601-54-9	1-5
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	68081-81-2	1-5
Sodium metasilicate	6834-92-0	0.1-1

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 > 201 °F / > 94 °C **Method** Seta closed cup

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

Suitable Extinguishing Media

Carbon dioxide (CO2). Foam. Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Material can create slippery conditions. Contact with metals may evolve flammable hydrogen gas.

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** 3 **Flammability** 1 **Instability** 0

HMIS **Health** 3 **Flammability** 1 **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 Avoid release of neat product into surface water and sanitary sewage 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** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
2-Butoxyethanol	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3 Skin	700 ppm TWA: 5 ppm TWA: 24 mg/m^3
Disodium phosphate, anhydrous	No data available	5 mg/m^3 PNOR (as solid)	No data available
Trisodium phosphate	No data available	No data available	No data available
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	No data available	No data available	No data available
Sodium metasilicate	No data available	No data available	No data available

Engineering Measures Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Yellow - Green	**Odor**	Slight
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	12.4	**Specific Gravity**	1.04
Evaporation Rate	0.55 (Butyl acetate=1)	**Percent Volatile (Volume)**	94.8
VOC Content (%)	3.8	**VOC Content (g/L)**	40
Vapor Pressure	16.6 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 %	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, Strong acids, Strong bases, Ammonium salts, Reducing agents, Aldehydes.

Hazardous Decomposition Products Carbon oxides, Aldehydes, Sulfur oxides, Hydrogen, by reaction with metals.

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 No information available

Dermal LD50 No information available

Inhalation LC50

Gas No information available not hazardous by inhalation

Mist No information available

Vapor No information available

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

Primary Routes of Entry Skin Absorption, Inhalation.

Acute Effects

Eyes Corrosive to the eyes and may cause severe damage including blindness.

Skin Causes skin burns. May be absorbed through the skin in harmful amounts.

Inhalation Harmful by inhalation. Causes burns. May cause central nervous system depression. Inhalation may cause central nervous system effects. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Blood disorder may occur after prolonged inhalation. Inhalation of vapors in high concentration can cause narcotic effects and metabolic acidosis.

Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Acidosis.

Chronic Toxicity Inhaled corrosive substances can lead to a toxic edema of the lungs. Liver and kidney injuries may occur. Contains a known or suspected carcinogen. May cause damage to the kidneys/liver/eyes/brain/respiratory system/central nervous system if inhaled.

Target Organ Effects Central Nervous System, Respiratory system, Lymphatic System, Blood, Liver, Kidney, Spleen, Skin, Eyes.

Aggravated Medical Conditions Respiratory disorders, Kidney disorders, Liver disorders, Neurological disorders, Skin disorders, Blood disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
2-Butoxyethanol	= 470 mg/kg (Rat)	= 220 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h	no data available	no data available

Disodium phosphate, anhydrous	no data available	no data available	no data available	no data available	no data available
Trisodium phosphate	> 2000 mg/kg (Rat)	> 300 mg/kg (Rabbit)	> 2.16 mg/L (Rat) 1 h	no data available	no data available
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	no data available	no data available	no data available	no data available	no data available
Sodium metasilicate	= 600 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
2-Butoxyethanol	no data available	no data available	no data available	no data available	liver, kidneys, lymphatic system, skin, blood, eyes, CNS, respiratory system
Disodium phosphate, anhydrous	no data available	no data available	no data available	no data available	no data available
Trisodium phosphate	no data available	no data available	no data available	no data available	no data available
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	no data available	no data available	no data available	no data available	no data available
Sodium metasilicate	no data available	no data available	no data available	no data available	no data available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Other
2-Butoxyethanol	A3	Group 3	not applicable	not applicable	not applicable
Disodium phosphate, anhydrous	not applicable	not applicable	not applicable	not applicable	not applicable
Trisodium phosphate	not applicable	not applicable	not applicable	not applicable	not applicable
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium metasilicate	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
2-Butoxyethanol	no data available	LC50 = 1490 mg/L Lepomis macrochirus 96 h LC50 = 2950 mg/L Lepomis macrochirus 96 h	no data available	1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50	0.81
Disodium phosphate, anhydrous	no data available	no data available	no data available	no data available	N/A
Trisodium phosphate	no data available	no data available	no data available	no data available	N/A
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	no data available	no data available	no data available	no data available	N/A
Sodium metasilicate	no data available	LC50 = 210 mg/L Brachydanio rerio 96 h	no data available	216: 96 h Daphnia magna mg/L EC50	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

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 metasilicate), 8, PG II

TDG

Hazard Class 8
UN-No UN3266
Packing Group 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 metasilicate), 8, PG II

IATA
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 metasilicate), 8, PG II

IMDG/IMO
Proper Shipping Name Corrosive liquid, basic inorganic, n.o.s.
Hazard Class 8
UN-No UN3266
Packing Group II
Shipping Description UN3266, Corrosive liquid, basic, inorganic, n.o.s.,(Sodium metasilicate), 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

Component	CAS-No	Weight %	SARA 313 - Threshold Values
2-Butoxyethanol	111-76-2	1-5	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
2-Butoxyethanol	Not applicable	Not applicable
Disodium phosphate, anhydrous	5000 lb	Not applicable
Trisodium phosphate	5000 lb	Not applicable
Benzenesulfonic acid, mono-C10-16 alkyl derivatives, sodium salts	Not applicable	Not applicable
Sodium metasilicate	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Adrienne McKee
Supercedes Date 09/16/2013
Issuing Date 04/11/2014
Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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