Safety Data Sheet: ANCOOL 3391

Supercedes Date 06/01/2009 **Issuing Date** 07/15/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name ANCOOL 3391
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 92TZ
Chemical nature Aqueous solution of alkali salts
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Amber **Physical State** Liquid **Odor** Slightly Aromatic

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 (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H314 - Causes severe skin burns and eye damage
H373 - May cause lung damage through prolonged or repeated exposure
H290 - May be corrosive to metals

Precautionary Statements
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P260 - Do not breathe mist
P264 - Wash face, hands and any exposed skin thoroughly after handling.
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 regulations.

14 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	40372-66-5	5-10
Polymaleic acid, sodium salt	70247-90-4	3-7
Sodium polyacrylate	9003-04-7	3-7
Sodium tolyltriazole	64665-57-2	1-5

Polyethylene glycol	25322-68-3	1-5
Sodium hydroxide	1310-73-2	0.1-1
Sodium molybdate dihydrate	10102-40-6	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 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 **Method** Not applicable

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

Suitable Extinguishing Media

Water spray. Foam. Alcohol-resistant foam. Carbon dioxide (CO2). 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, MSHA/NIOSH (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 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** 35 °F / 2 °C **Maximum** 105 °F / 41 °C

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	No data available	No data available	No data available
Polymaleic acid, sodium salt	No data available	No data available	No data available
Sodium polyacrylate	3 mg/m^3 PNOS	5 mg/m^3 PNOR	0.05 mg/m^3 8hr OEL - Vendor data
Sodium tolyltriazole	No data available	No data available	No data available
Polyethylene glycol	No data available	No data available	No data available
Sodium hydroxide	Ceiling: 2 mg/m^3	TWA: 2 mg/m^3	IDLH: 10 mg/m^3 Ceiling: 2 mg/m^3
Sodium molybdate dihydrate	TWA: 0.5 mg/m^3	TWA: 5 mg/m^3	IDLH: 1000 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 suitable protective clothing, Impervious gloves.
Respiratory Protection	In case of insufficient ventilation wear suitable respiratory equipment. 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

Physical State	Liquid	**Viscosity**	Non viscous
Color	Amber	**Odor**	Slightly Aromatic
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	14	**Specific Gravity**	1.15
Evaporation Rate	0.48 (Butyl acetate=1)	**Percent Volatile (Volume)**	84.7
VOC Content (%)	2	**VOC Content (g/L)**	23
Vapor Pressure	15.0 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	> 212 °F / 100 °C	**Flammability (solid, gas)**	No data available
Flash Point	Does not flash	**Method**	Not applicable
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	Acids, Strong oxidizing agents, Aldehydes, Acrolein, Ketones, Highly halogenated compounds, Fluorinated hydrocarbons, Phosphorus compounds, Metals, Strong bases, sodium hypochlorite.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Sodium oxides, Oxides of phosphorus, Hydrogen cyanide (hydrocyanic acid), Phosphorus compounds, Alcohols, Ketones, 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
Mist	No information available
Vapor	No information available
Principle Route of Exposure	Skin contact, Eye contact, Inhalation.
Primary Routes of Entry	Ingestion
Acute Effects	
Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes skin burns.
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.
Chronic Toxicity	Inhaled corrosive substances can lead to a toxic edema of the lungs.
Target Organ Effects	No information available
Aggravated Medical Conditions	No information available

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	no data available	no data available	no data available	no data available	no data available
Polymaleic acid, sodium salt	no data available	no data available	no data available	no data available	no data available
Sodium polyacrylate	no data available	no data available	no data available	no data available	no data available
Sodium tolyltriazole	no data available	no data available	no data available	no data available	no data available

Polyethylene glycol	no data available	> 20 mL/kg (Rabbit)	no data available	no data available	no data available
Sodium hydroxide	no data available	= 1350 mg/kg (Rabbit)	no data available	no data available	no data available
Sodium molybdate dihydrate	no data available	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	no data available	no data available	no data available	no data available	no data available
Polymaleic acid, sodium salt	no data available	no data available	no data available	no data available	no data available
Sodium polyacrylate	no data available	no data available	no data available	no data available	no data available
Sodium tolyltriazole	no data available	no data available	no data available	no data available	no data available
Polyethylene glycol	no data available	no data available	no data available	no data available	no data available
Sodium hydroxide	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
Sodium molybdate dihydrate	no data available	no data available	no data available	no data available	respiratory system, eyes, liver, kidneys, blood, bones, joints, teeth

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	not applicable	not applicable	not applicable	not applicable	not applicable
Polymaleic acid, sodium salt	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium polyacrylate	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium tolyltriazole	not applicable	not applicable	not applicable	not applicable	not applicable
Polyethylene glycol	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium hydroxide	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium molybdate dihydrate	A3	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-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	no data available	no data available	no data available	no data available	N/A
Polymaleic acid, sodium salt	no data available	no data available	no data available	no data available	N/A
Sodium polyacrylate	no data available	no data available	no data available	no data available	N/A
Sodium tolyltriazole	no data available	no data available	no data available	no data available	N/A
Polyethylene glycol	no data available	LC50 > 5000 mg/L Carassius auratus 24 h	EC50 = 100000 mg/L 15 min	no data available	N/A
Sodium hydroxide	no data available	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A
Sodium molybdate dihydrate	no data available	no data available	no data available	no data available	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 DOT
Proper Shipping Name Sodium hydroxide solution
Hazard Class 8
UN-No UN1824
Packing Group II
Description UN1824, Sodium hydroxide solution, 8, PG II

TDG TDG
Hazard Class 8
UN-No UN1824
Packing Group II

ICAO	ICAO
UN-No	UN1824
Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
Packing Group	II
Shipping Description	Sodium hydroxide solution,8,UN1824,PG II
IATA	IATA
UN-No	UN1824
Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
Packing Group	II
ERG Code	8L
Shipping Description	UN1824,Sodium hydroxide solution,8,PG II
IMDG/IMO	IMDG/IMO
Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
UN-No	UN1824
Packing Group	II
EmS No.	F-A, S-B
Shipping Description	UN1824, Sodium hydroxide solution,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 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	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	Not applicable	Not applicable
Polymaleic acid, sodium salt	Not applicable	Not applicable
Sodium polyacrylate	Not applicable	Not applicable
Sodium tolyltriazole	Not applicable	Not applicable
Polyethylene glycol	Not applicable	Not applicable
Sodium hydroxide	1000 lb	Not applicable
Sodium molybdate dihydrate	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By	Sarah Williamson
Supercedes Date	06/01/2009
Issuing Date	07/15/2013
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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