

# Material Safety Data Sheet: ANCOOL 3390

Supersedes Date 04/13/2010

Issuing Date 08/09/2013

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** ANCOOL 3390  
**Recommended use** Water treatment chemical  
**Information on Manufacturer**  
CHEM-AQUA, INC  
BOX 152170  
IRVING, TEXAS 75015

**Product Code** 47TZ  
**Chemical nature** Aqueous dispersion  
**Emergency Telephone Number**  
CHEMTREC® 800-424-9300

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

DANGER  
Corrosive  
Causes skin and eye burns  
May cause delayed lung injury and burns  
Harmful or fatal if swallowed

**Color** Yellow

**Physical State** Liquid

**Odor** Slight

**Potential Health Effects**

**Principle Route of Exposure**

Skin contact, Eye contact, Inhalation.

**Primary Routes of Entry**

Inhalation

**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.

**Chronic Toxicity**

Inhaled corrosive substances can lead to a toxic edema of the lungs. Liver and kidney injuries may occur.

**Target Organ Effects**

Respiratory system, Liver, Kidney, Blood, Bone.

**Aggravated Medical Conditions**

Respiratory disorders, Skin disorders, Liver disorders, Kidney disorders, Blood disorders.

**Potential Environmental Effects**

See Section 12 for additional Ecological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
2-Phosphonobutane-1,2,4-tricarboxylic acid, sodium salt	40372-66-5
Sodium hydroxide	1310-73-2
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	111560-38-4
Polyethylene glycol	25322-68-3
Sodium polyacrylate	9003-04-7
Sodium tolyltriazole	64665-57-2
Phosphonic acid, [nitrilotris(methylene)]tris-, sodium salt	20592-85-2
Sodium molybdate	7631-95-0

## 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 > 201 °F / > 94 °C Method Estimated  
 Autoignition Temperature No information available.  
 Flammability Limits in Air % Hydrogen, by reaction with metals. Upper 75 Lower 4  
 Suitable Extinguishing Media  
 Water spray. 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 1 Instability 0  
 HMIS Health 3 Flammability 1 Instability 0

**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** 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 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
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	No data available	No data available	No data available
Polyethylene glycol	No data available	No data available	No data available
Sodium polyacrylate	3 mg/m <sup>3</sup> PNOS	5 mg/m <sup>3</sup> PNOR	0.05 mg/m <sup>3</sup> 8hr OEL - Vendor data
Sodium tolyltriazole	No data available	No data available	No data available
Phosphonic acid, [nitrioltris(methylene)]tris-, sodium salt	No data available	No data available	No data available
Sodium molybdate	TWA: 0.5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup>

**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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State** Liquid **Viscosity** Non viscous  
**Color** Yellow **Odor** Slight  
**Appearance** Transparent **pH** 14  
**Specific Gravity** 1.15 **Evaporation Rate** 0.48 (Butyl acetate=1)

Percent Volatile (Volume) 86.3  
 VOC Content (g/L) 34  
 Vapor Density 0.6 (Air = 1.0)  
 Boiling Point/Range 212 °F / 100 °C

VOC Content (%) 3  
 Vapor Pressure 14.7 mmHg @ 70°F  
 Solubility Completely soluble

### 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable. Hazardous polymerization does not occur.  
**Conditions to Avoid** None known  
**Incompatible Products** Strong oxidizing agents, Reducing agents, Acids, Aldehydes, Halogenated hydrocarbon, Leather, Oxides of phosphorus, Tetrahydrofuran, Metals.  
**Hazardous Decomposition Products** Carbon oxides, Nitrogen oxides (NOx), Oxides of phosphorus, Phosphorus compounds, Alcohols, Ketones, Hydrogen cyanide, Contact with metals liberates hydrogen gas.  
**Possibility of Hazardous Reactions** None under normal processing

### 11. TOXICOLOGICAL INFORMATION

**Product Information** 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
Sodium hydroxide	no data available	= 1350 mg/kg ( Rabbit )	no data available	no data available	no data available
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	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 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
Phosphonic acid, [nitrilotris (methylene)]tris-, sodium salt	no data available	no data available	no data available	no data available	no data available
Sodium molybdate	no data available	no data available	> 2080 mg/m <sup>3</sup> ( Rat ) 4 h	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
Sodium hydroxide	no data available	no data available	no data available	no data available	eyes, respiratory system, skin
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	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 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
Phosphonic acid, [nitrilotris (methylene)]tris-, sodium salt	no data available	no data available	no data available	no data available	no data available
Sodium molybdate	no data available	no data available	no data available	no data available	respiratory system, eyes, kidneys, blood, bone, pancreas

##### 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
Sodium hydroxide	not applicable	not applicable	not applicable	not applicable	not applicable
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	not applicable	not applicable	not applicable	not applicable	not applicable
Polyethylene glycol	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
Phosphonic acid, [nitrilotris (methylene)]tris-, sodium salt	not applicable	not applicable	not applicable	not applicable	not applicable

Sodium molybdate	A3	not applicable	not applicable	not applicable	not applicable
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## 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
Sodium hydroxide	no data available	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	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 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
Phosphonic acid, [nitrilotris(methylene)]tris-, sodium salt	no data available	no data available	no data available	no data available	N/A
Sodium molybdate	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

**Proper Shipping Name** Sodium hydroxide solution  
**Hazard Class** 8  
**UN-No** UN1824  
**Packing Group** II  
**Reportable Quantity (RQ)** Sodium hydroxide, RQ kg= 12061.64  
**Description** UN1824, Sodium hydroxide solution, 8, PG II

### TDG

**Proper shipping name** Sodium hydroxide solution  
**Hazard Class** 8  
**UN-No** UN1824  
**Packing Group** II  
**Description** UN1824, Sodium hydroxide solution, 8, PG II

### ICAO

**UN-No** UN1824  
**Proper Shipping Name** Sodium hydroxide solution  
**Hazard Class** 8  
**Packing Group** II  
**Shipping Description** UN1824, Sodium hydroxide solution, 8, PG II

### 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

**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
Sodium hydroxide	1000 lb	Not applicable
2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed, sodium salt	Not applicable	Not applicable
Polyethylene glycol	Not applicable	Not applicable
Sodium polyacrylate	Not applicable	Not applicable
Sodium tolyltriazole	Not applicable	Not applicable
Phosphonic acid, [nitrilotris(methylene)]tris-, sodium salt	Not applicable	Not applicable
Sodium molybdate	Not applicable	Not applicable

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

E Corrosive material D2A Very toxic materials



**16. OTHER INFORMATION**

Prepared By Sarah Williamson  
 Supersedes Date 04/13/2010  
 Issuing Date 08/09/2013  
 Reason for Revision No information available.  
 Glossary No information available.  
 List of References. No information available.

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