Material Safety Data Sheet: CHEM-AQUA 888

Supercedes Date 05/21/2014 **Issuing Date** 06/16/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 888
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA
253 ORENDA ROAD
BRAMPTON ONT L6T 1E6

Product Code 058C
Chemical nature Aqueous solution of alkali salts
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 Colorless - Light yellow **Physical State** Liquid **Odor** Slightly Sweet

Potential Health Effects

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 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. Contains a known or suspected reproductive toxin.

Target Organ Effects Bone, Central nervous system, Kidney, Liver, Blood, Eyes, Skin, Respiratory system, Reproductive System.

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

Potential Environmental Effects See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Sodium molybdate	7631-95-0
Sodium metaborate tetrahydrate	10555-76-7
Sodium tolyltriazole	64665-57-2
Polycarboxylate, sodium salt	25085-41-0

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 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** Not applicable

Autoignition Temperature No information available.

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

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO2). 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, 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. Metal containers must be lined. Keep containers tightly closed in a dry, cool and well-ventilated place. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.				
Storage Temperature	**Minimum**	36 °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
Sodium molybdate	TWA: 0.5 mg/m^3	TWA: 5 mg/m^3	No data available
Sodium metaborate tetrahydrate	TWA: 2 mg/m^3	No data available	No data available
Sodium tolyltriazole	No data available	No data available	No data available
Polycarboxylate, sodium salt	No data available	No data available	No data available

Engineering Measures	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	Colorless - Light yellow	**Odor**	Slightly Sweet
Appearance	Transparent - Hazy	**pH**	12.4
Specific Gravity	1.172	**Evaporation Rate**	0.49 (Butyl acetate=1)
Percent Volatile (Volume)	91.1	**VOC Content (%)**	0
VOC Content (g/L)	0	**Vapor Pressure**	14.5 mmHg @ 70°F
Vapor Density	0.6 (Air = 1.0)	**Solubility**	Completely soluble
Boiling Point/Range	212 °F / 100 °C		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Extremes of temperature and direct sunlight
Incompatible Products	Strong oxidizing agents, Reducing agents, Acids.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Sodium oxides, Hydrogen, by reaction with metals.
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
Sodium molybdate	= 4000 mg/kg (Rat)	no data available	> 2080 mg/m^3 (Rat) 4 h	no data available	no data available
Sodium metaborate tetrahydrate	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
Polycarboxylate, sodium salt	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
Sodium molybdate	no data available	no data available	no data available	no data available	Bones, CNS, kidneys, liver, blood
Sodium metaborate tetrahydrate	no data available	no data available	no data available	X	Testes
Sodium tolyltriazole	no data available	no data available	no data available	no data available	no data available
Polycarboxylate, sodium salt	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium molybdate	A3	not applicable	not applicable	not applicable	not applicable
Sodium metaborate tetrahydrate	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium tolyltriazole	not applicable	not applicable	not applicable	not applicable	not applicable
Polycarboxylate, sodium salt	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
Sodium molybdate	no data available	no data available	no data available	no data available	N/A
Sodium metaborate tetrahydrate	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
Polycarboxylate, sodium salt	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 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 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 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 tolytriazole), 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 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
Shipping Description	UN3266, Corrosive liquid, basic, inorganic, n.o.s.,(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 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
Sodium molybdate	Not applicable	Not applicable
Sodium metaborate tetrahydrate	Not applicable	Not applicable
Sodium tolyltriazole	Not applicable	Not applicable
Polycarboxylate, sodium salt	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 D2B Toxic materials D2A Very toxic materials

16. OTHER INFORMATION

Prepared By	Ana Santiago
Supercedes Date	05/21/2014
Issuing Date	06/16/2014
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

CHEM-AQUA assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.