CHEMAQUA
BOX 152170
IRVING, TEXAS
75015

WAPPINGERS CENTRAL SCHOOL
FACILITIES & OPERATIONS
99 MYERS CORNERS RD RCK A
WAPPINGERS FALLS, NY 12590

O.S.H.A. MSDS ENCLOSED
RETENTION REQUIRED BY LAW

IMPORTANT DOCUMENT ENCLOSED
O.S.H.A. INFORMATION

Customer Number : 403045
Bill of Lading Number: USA387
Order Number : 928201

Material Safety Data Sheet: CHEM-AQUA 999

Supercedes Date 01/30/2012 **Issuing Date** 10/26/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 999
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 237C
Chemical nature Aqueous solution of alkali salts
Emergency Telephone Number
CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
WARNING
Oxidizing agent
Severe skin irritation
Causes severe eye irritation
May be harmful if inhaled
Harmful if swallowed

Color Colorless - Light yellow **Physical State** Liquid **Odor** Odorless

Potential Health Effects

Principle Route of Exposure	Skin contact, Eye contact, Inhalation.
Primary Routes of Entry	Inhalation, Ingestion.
Acute Effects	
Eyes	Severe irritation. May cause irreversible eye damage.
Skin	Severe irritation.
Inhalation	Causes respiratory tract irritation. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Blood disorder may occur after prolonged inhalation. Methemoglobinemia.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if swallowed. Blood disorder may occur after ingestion. Components of the product create formation of methemoglobin.
Chronic Toxicity	Prolonged exposure can be harmful for certain organs, e.g. liver, kidneys, blood, nervous system and skin. Methemoglobinemia. Cyanosis. Experiments have shown reproductive toxicity effects on laboratory animals.
Target Organ Effects	Respiratory system, Skin, Blood, Spleen, Heart, Liver, Kidney, Central nervous system, Testes.
Aggravated Medical Conditions	Cardiovascular, Skin disorders, Respiratory disorders, Blood disorders, Liver disorders, Kidney disorders, Neurological disorders.
Potential Environmental Effects	See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Sodium nitrite	7632-00-0
Sodium metaborate tetrahydrate	10555-76-7

4. FIRST AID MEASURES

General advice	Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist, or gas.
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	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before re-use.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and afterwards drink plenty of water
Notes to physician	Since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need to be treated only by supportive measures.

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. Alcohol-resistant 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. Oxidizing potential. 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 **Other** OX

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 Pick up and transfer to properly labeled containers.

Neutralizing Agent Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

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** 115 °F / 46 °C

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium nitrite	No data available	No data available	No data available
Sodium metaborate tetrahydrate	TWA: 2 mg/m^3 STEL: 6 mg/m^3	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 insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Colorless - Light yellow	**Odor**	Odorless
Appearance	Transparent	**pH**	12.4
Specific Gravity	1.21	**Evaporation Rate**	0.44
Percent Volatile (Volume)	84.4	**VOC Content (%)**	0
VOC Content (g/L)	0	**Vapor Pressure**	13.2 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 None known

Incompatible Products Strong oxidizing agents, Reducing agents, Avoid amines, Contact with metals liberates hydrogen gas.

Hazardous Decomposition Products Sodium oxides, Nitrogen oxides (NOx), Hydrogen, by reaction with metals.

Possibility of Hazardous Reactions Oxidizing properties

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium nitrite	= 85 mg/kg (Rat)	no data available	= 5.5 mg/L (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

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium nitrite	no data available	no data available	no data available	no data available	liver, kidneys, nervous system, spleen, blood, heart
Sodium metaborate tetrahydrate	no data available	no data available	no data available	X	Testes

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium nitrite	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium metaborate tetrahydrate	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 nitrite	no data available	LC50 = 0.19 mg/L Oncorhynchus mykiss 96 h LC50 0.092 - 0.13 mg/L Oncorhynchus mykiss 96 h LC50 0.4 - 0.6 mg/L Oncorhynchus mykiss 96 h LC50 0.65 - 1 mg/L Oncorhynchus mykiss 96 h LC50 = 2.3 mg/L Pimephales promelas 96 h LC50 = 20 mg/L Pimephales promelas 96 h	no data available	no data available	-3.7
Sodium metaborate tetrahydrate	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 <400#- NOT REGULATED >399# - ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (SODIUM NITRITE)
UN-No UN3082
Packing Group III
Reportable Quantity (RQ) RQ @ 400lbs
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.,(SODIUM NITRITE), 9,III, RQ

TDG

Proper shipping name <400#- NOT REGULATED >399#- ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (SODIUM NITRITE)
Hazard Class 9
UN-No UN3082

Packing Group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.,(SODIUM NITRITE), 9, PG III, RQ

ICAO

UN-No	UN3082
Proper Shipping Name	<400#- NOT REGULATED >399#- ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (SODIUM NITRITE)
Hazard Class	9
Packing Group	III
Shipping Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.,(SODIUM NITRITE), 9, PG III, RQ

IATA

UN-No	UN3082
Proper Shipping Name	<400# - NOT REGULATED >399# - ENVIRONMENTALLY HAZAROUS SUBSTANCE, LIQUID, N.O.S., (SODIUM NITRITE)
Hazard Class	9
Packing Group	III
Shipping Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.,(SODIUM NITRITE), 9, PG III, RQ

IMDG/IMO

Proper Shipping Name	<400# - NOT REGULATED >399# - ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (SODIUM NITRITE)
Hazard Class	9
UN-No	UN3082
Packing Group	III
Shipping Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.,(SODIUM NITRITE), 9, PG III, RQ

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
Sodium nitrite	7632-00-0	25	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
Sodium nitrite	100 lb	Not applicable
Sodium metaborate tetrahydrate	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

D1B Toxic materials, C Oxidizing materials.

16. OTHER INFORMATION

Supercedes Date	01/30/2012
Issuing Date	10/26/2012
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

CHEM-AQUA, INC 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 MSDS 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.