

Categorical Determination 40CFR403.6(a)

1. Superior may request certification from ADEQ on whether their processes fall within a particular subcategory. Superior is a new source. New sources must request this certification before commencing regulated discharge. Superior submitted an application for determination dated 1-14-00. ADEQ has determined that Superior forming operations fall under 40CFR467 Subpart D.

a. APPLICABILITY--In 40CFR467.01 find "Aluminum forming includes commonly recognized forming operations such as rolling, drawing, extruding, and forging and related operations such as heat treatment, casting, and surface treatments. Surface treatment of aluminum is any chemical or electrochemical treatment applied to the surface of aluminum. Such surface treatment is considered to be a part of aluminum forming whenever it is performed as an integral part of aluminum forming. For the purposes of this regulation, surface treatment of aluminum is considered to be an integral part of aluminum forming whenever it is performed at the same plant site at which aluminum is formed and such operations are not considered for regulation under the Electroplating and Metal Finishing provisions of 40 CFR Parts 413 and 433. Casting aluminum when performed as an integral part of aluminum forming and located on-site at an aluminum forming plant is considered an aluminum forming operation and is covered under these guidelines". Under Subpart D-Forging Subcategory in §467.41(a) find "The 'core' of the forging subcategory shall include forging, artificial aging, annealing, degreasing, and sawing."

In 40CFR403.3(k)(1) find "The term 'New Source' means...construction...commenced after the publication of proposed Pretreatment Standards". The 40CFR467 proposal was published on November 22, 1982. In 40CFR467.46 find "any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources."

b. EVIDENCE--The Superior Industries International, Inc facility in Heber Springs, Arkansas will form aluminum in a forging operation; in a related operation aluminum is melted and cast on site as part of the forging operation; and, hence, the casting operation is an integral part of the forging operation. Superior will install the forming/forging operation in February 2000 and, hence, the Heber Springs site is a new source; and, finally, wastewater (containing pollutants) from the core (forging, etc.) and ancillary operations (Forging Scrubber Liquor, etc.) are (will be) introduced into the City of Heber Springs POTW; therefore, in accordance with 40CFR467 [Subpart D-Forging Subcategory], the Superior Heber Springs facility falls under §467.46 Pretreatment standards for new sources.

Gage, Hannah

From: Greg Cothren <greg.cothren@st-ji.com>
Sent: Thursday, November 12, 2009 2:09 PM
To: Gilliam, Allen
Subject: RE: 11/03 inspection remaining questions
Attachments: MSDS - MB2128.pdf; MSDS - CBD 94.pdf; MSDS - ChemAqua 11000.pdf

The Flow Meter is Kent / ABB C-700 Positive Displacement Water Meters - 1" fittings. It has not been calibrated to the best of our knowledge, and the flow is generated from monthly readings. The single time dump has not been determined yet, but I will have the best information available Monday, if not sooner. The flow rate is calculated from the overall usage for a six month period and not a single occurrence dump. I will have a clearer picture and response in a few days.

The MSDS, you requested, are attached:

Greg Cothren
Environmental Health & Safety Coordinator
501-362-9590

Saint Jean Industries, Inc.
424 Industrial Park Road
Heber Springs, AR 72543
-----Original Message-----

From: Gilliam, Allen [<mailto:GILLIAM@adeq.state.ar.us>]
Sent: Thursday, November 12, 2009 11:40 AM
To: Greg Cothren
Subject: 11/03 inspection remaining questions

Greg,

As promised, this is the reminder to get a good description from your maintenance folks how the quench/cooling tower system works. IE: how often is it blown down (or is it continuous?), what is the average volume of this water discharged to the city on a avg daily basis? What is the brand and size of your flow meter and how often is it calibrated for accuracy?

Please pdf me the chems used in the quench water system.

Have a good weekend,

Allen g

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name MB-2128, C/M
 Recommended Use Water treatment chemical
Information on Manufacturer
 CHEM-AQUA, INC
 BOX 152170
 IRVING, TEXAS 75015

Product Code 0306
 Chemical Nature aqueous solution
Emergency Telephone Number
 CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
 Danger
 Corrosive
 Causes skin and eye burns
 Harmful if inhaled and may cause delayed lung injury
 Harmful or fatal if swallowed

Color Colorless	Physical State Liquid	Odor Odorless
Potential Health Effects		
Principle Route of Exposure	Skin contact, Eye contact, Inhalation.	
Primary Routes of Entry	None known.	
Acute Effects		
Eyes	Causes eye burns. May cause irreversible eye damage	
Skin	Causes skin burns	
Inhalation	Risk of serious damage to the lungs (by inhalation). Causes burns. May cause central nervous system depression	
Ingestion	Ingestion causes burns of the upper digestive and respiratory tracts	
Chronic Effects	Liver injury may occur, Inhaled corrosive substances can lead to a toxic edema of the lungs.	
Target Organ Effects	Respiratory system, Central nervous system, Liver, Eyes, Skin, Blood, Reproductive System.	
Aggravated Medical Conditions	Central nervous system, Liver disorders, Respiratory disorders, Skin disorders.	
Potential Environmental Effects	See Section 12 for additional Ecological information	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Ethyl alcohol	64-17-5
Didecyl dimethyl ammonium chloride	7173-51-5

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately
Skin Contact	Remove/Take off 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	Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsions may be needed

5. FIRE-FIGHTING MEASURES

Flash Point	>201°F/>94°C	Method	Seta closed cup
Autoignition Temperature	No information available		
Flammability Limits in Air % Mixture		Upper 3.3	Lower 19
Suitable Extinguishing Media	Foam. Alcohol-resistant foam. Dry chemical. Water spray. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment		
Specific Hazards Arising from the Chemical	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. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so
Environmental Precautions	Do not flush into surface water or sanitary sewer system. Prevent product from entering drains
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to 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	Not applicable

7. HANDLING AND STORAGE

Handling Storage: Handle in accordance with good industrial hygiene and safety practice. Store in original container. Do not freeze.

Storage Temperature: Minimum 35°F/2°C, Maximum 140°F/60°C

Storage Conditions: Indoor X Outdoor, Heated, Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Ethyl alcohol	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Didecyl dimethyl ammonium chloride	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: Impervious gloves, Impervious clothing; Respiratory Protection: Use NIOSH approved respiratory protection

General Hygiene Considerations: Do not get in eyes, on skin, or on clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Wear protective gloves/clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid; Viscosity: Non viscous

Color: Colorless; Odor: Odorless

Appearance: Transparent; pH: 6.0

Specific Gravity: 1.01; Bulk Density: 8.42

Evaporation Rate: 0.1 (Butyl acetate=1); Percent Volatile (Volume): No information available

VOC Content (%): No information available; Vapor Pressure: 17.4 mmHg @ 70 °F

Vapor Density: No information available; 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.

Hazardous Decomposition Products: Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Amines.

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
Ethyl alcohol	7060 mg/kg (Rat)	no data available	no data available	no data available	no data available
Didecyl dimethyl ammonium chloride	84 mg/kg (Rat)	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Ethyl alcohol	no data available	no data available	no data available	no data available	respiratory system, skin, eyes, CNS, liver, blood, reproductive system
Didecyl dimethyl ammonium chloride	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Ethyl alcohol	not applicable	Group 1	Known	X	not applicable
Didecyl dimethyl ammonium chloride	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
Ethyl alcohol	no data available	96 Hr LC50 Oncorhynchus mykiss: 12.0-16.0 ml/L [static]; 96 Hr LC50 Pimephales promelas:>100 mg/L [static]; 96 Hr LC50 Pimephales promelas:13400-15100 mg/L [flow-through]	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	48 Hr LC50 Daphnia magna: 9268 mg/L; 24 Hr EC50 Daphnia magna:10800 mg/L	-0.32

Didecyl dimethyl ammonium chloride	no data available	no data available	no data available	no data available	N/A
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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. Do not re-use empty containers

14. TRANSPORT INFORMATION

DOT Not regulated
 TDG Not regulated
 ICAO Not regulated
 IATA Not regulated
 IMDG/IMO Not regulated

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 Title 40n 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
Ethyl alcohol	Not applicable	Not applicable
Didecyl dimethyl ammonium chloride	Not applicable	Not applicable

Canada

This product may not be commercially placed on the market in Canada

WHMIS Hazard Class

Not applicable

16. OTHER INFORMATION

Prepared By Dan Hollas
 Supersedes Date 05/09/2000
 Issuing Date 04/30/2009
 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

(000000-000000- -456C)

DATE OF ISSUE
2/05/2002

SUPERSEDES
12/14/1999

SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms

Trade Name & Synonyms

N/A

CBD-94

Chemical Family:
POLYACRYLATE

Formula Mixture --> X

Manufacturer's Name:
CHEMAQUA, INC

Address:
BOX 152170
IRVING, TEXAS 75015

Prepared By:
L Boynton/Chemist

Product Code Number
456C

Emergency Phone Number
800-424-9300

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
SODIUM POLYACRYLATE	IRRITANT	N/E	1. N/E	2. N/E	9003-04-7

SECTION III - PHYSICAL DATA

Boiling Point (F):	213°	Specific Gravity (H2O=1):	1.03
Vapor Pressure (MM HG):	16.42	Color:	LIGHT YELLOW
Vapor Density (Air=1):	0.6	Odor:	SLIGHT SWEET
PH @ 100% :	12.4	Clarity:	TRANSPARENT
% Volatile by Volume:	96.1	Evaporation Rate (BU A/C=1):	0.57
H2O Solubility:	COMPLETE	Viscosity:	NON-VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point >200°F / SETAFLASH	Flammable Limits N/A	LEL N/A	UEL N/A
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Extinguishing Media
 X --Foam X --Alcohol Foam X --CO2 X --Dry Chemical X --Water Spray X --Other

Special Fire Fighting Procedures:
 FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. EXTINGUISHING MEDIA SHOULD BE CHOSEN BASED ON THE NATURE OF THE SURROUNDING FIRE.

Unusual Fire and Explosion Hazards:
 SPILLED MATERIAL MAY BE SLIPPERY. CLOSED CONTAINERS MAY RUPTURE (DUE TO PRESSURE BUILDUP) WHEN EXPOSED TO EXTREME HEAT. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Aerosol Level (NFPA 30B): N/A

NFPA 704 Hazard Rating (0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)
 1 --Health 1 --Flammability 0 --Instability --Special

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value:
 NOT ESTABLISHED. 1.

Effects of Overexposure:

-Acute (Short Term Exposure)

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS TEARING, REDNESS AND A BURNING SENSATION. SKIN CONTACT: CAUSES SEVERE IRRITATION SEEN AS REDNESS, ITCHING AND A BURNING SENSATION. INHALATION: MAY CAUSE RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING AND DIARRHEA.

-Chronic (Long Term Exposure)

NO HUMAN CHRONIC EFFECTS KNOWN. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA AND DERMATITIS. TARGET ORGANS: NONE KNOWN. THERE IS NO PRIMARY ROUTE OF ENTRY INTO THE BODY. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

Primary Routes of Entry: --Inhalation --Ingestion --Absorption

Emergency and First Aid Procedures:

-Inhalation:
 REMOVE FROM THE AREA TO FRESH AIR. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION DEVELOPS OR IF BREATHING BECOMES DIFFICULT.

-Eye Contact:
 IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

SECTION V - HEALTH HAZARD DATA (Continued)

-Skin Contact:

WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. GET IMMEDIATE MEDICAL ATTENTION. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

-Ingestion:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. SEEK MEDICAL ATTENTION IF DISCOMFORT OCCURS.

-Notes to Physician:

THERE IS NO SPECIFIC ANTIDOTE. TREAT THE PATIENT SYMPTOMATICALLY.

SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:
IARC--> No NTP--> No OSHA--> No ACGIH--> No OTHER--> No

SODIUM POLYACRYLATE
EYE-RBT SDT: 2 MG MODERATE 3.
ORL-RAT LD50: >40 G/KG 3.
IHL-RAT TCLO: 10 MG/M3/6H/RW-I 3.

SECTION VII - REACTIVITY DATA

Stability: X <--Stable <--Unstable

Conditions to Avoid:
NONE KNOWN. DO NOT STORE IN DIRECT SUNLIGHT.

Incompatibility (Materials to Avoid):

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; STRONG ACIDS. AVOID DIRECT CONTACT WITH TIN, ZINC, COPPER, BRASS, BRONZE AND ALUMINUM.

Hazardous Decomposition Products:

OXIDES OF CARBON AND SODIUM.

Hazardous Polymerization: <--May Occur X <--Will Not Occur

Conditions to Avoid:
N/A

SECTION VIII - SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled:

WEAR APPROPRIATE PROTECTIVE CLOTHING. USE CARE AS SPILLS MAY BE SLIPPERY. VENTILATE THE AREA. DIKE AND CONTAIN SPILL. ABSORB WITH AN INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. PREVENT PRODUCT FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS AND BODIES OF WATER. FLUSH AREA WITH WATER.

Waste Disposal Method(s):

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

Neutralizing Agent:

USE DILUTE ACIDS SUCH AS HYDROCHLORIC ACID OR VINEGAR. ADD CAUTIOUSLY WHILE MIXING. WEAR APPROPRIATE PROTECTIVE CLOTHING.

SECTION IX - SPECIAL PROTECTION INFORMATION

Required Ventilation:

GENERAL MECHANICAL VENTILATION IS NORMALLY ADEQUATE.

Respiratory Protection:

NONE REQUIRED UNDER NORMAL CONDITIONS OF USE. A NIOSH/MSHA APPROVED RESPIRATOR IN POORLY VENTILATED AREAS AND/OR FOR EXPOSURE WHERE MISTING EXISTS.

Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN WHEN HANDLING.

Eye Protection:

CHEMICAL GOGGLES SHOULD BE WORN.

Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING.

SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors--> X Outdoors--> Heated--> Refrigerated-->
Minimum Temperature: 45°F Maximum Temperature: 110°F

Precautions to be Taken in Handling and Storing:

ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER, OUT OF SUNLIGHT. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. KEEP FROM FREEZING. IF PRODUCT FREEZES ALLOW IT TO SLOWLY WARM TO ROOM TEMPERATURE AND STIR THOROUGHLY BEFORE USING.

Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ ENTIRE LABEL BEFORE USING PRODUCT. FOLLOW LABEL DIRECTIONS.

SECTION XI - REGULATORY INFORMATION

Chemical Name

CAS Number

Upper % Limit

None

SECTION XI - REGULATORY INFORMATION (Continued)

Those ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer.
This MSDS is not intended for users in the state of California.

SECTION XII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2001.
2. OSHA PEL.
3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 2001.

ALL COMPONENTS IN THIS PRODUCT CAN BE FOUND IN THE CURRENT TSCA INVENTORY.

IRR: IRRITANT, FLAM/FLAMM: FLAMMABLE, COMB: COMBUSTIBLE,
CORR: CORROSIVE CARC: CARCINOGENIC, TOX: TOXIC, N/A: NOT APPLICABLE, N/E: NOT ESTABLISHED, COC: CLEVELAND OPEN CUP, PMCC: PENSLEY-MARTIN CLOSED CUP,
TCC: TAGLIABUE CLOSED CUP, LEL: LOWER EXPLOSION LIMIT, UEL: UPPER EXPLOSION LIMIT, NFPA: NATIONAL FIRE PROTECTION ASSOCIATION, IARC: INTERNATIONAL AGENCY
FOR THE RESEARCH ON CANCER, NTP: NATIONAL TOXICOLOGY PROGRAM, OSHA: OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, ACGIH: AMERICAN CONFERENCE OF
GOVERNMENTAL INDUSTRIAL HYGIENISTS, TLV: THRESHOLD LIMIT VALUE, PEL: PERMISSIBLE EXPOSURE LIMIT, STEL: SHORT-TERM EXPOSURE LIMIT, MLD: MILD,
MOD: MODERATE, SEV: SEVERE, MUT: MUTAGENIC, ASPHYX: ASPHYXIANT, PPOS: PARTICULATES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT: STANDARD DRAIZE TEST, ORL:
ORAL, HMN: HUMAN, IHL: INHALATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED
REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

CHEMAQUA, 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.

Material Safety Data Sheet: CHEM-AQUA 11000

Supersedes Date 06/17/2005

Issuing Date 06/13/2008

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 11000
 Recommended Use Water treatment chemical
 Information on Manufacturer
 CHEM-AQUA, INC
 BOX 152170
 IRVING, TEXAS 75015

Product Code 098C
 Chemical Nature Aqueous solution
 Emergency Telephone Number
 CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview
 Warning
 Severe skin irritation
 Severe eye irritation
 Causes respiratory tract irritation
 Harmful if swallowed

Color Yellow - Amber	Physical State Liquid	Odor Sweet
Potential Health Effects		
Principle Route of Exposure	Skin contact, Eye contact.	
Primary Routes of Entry	Not applicable.	
Acute Effects		
Eyes	Severe eye irritant.	
Skin	Severe skin irritant.	
Inhalation	Irritating to mucous membranes.	
Ingestion	Irritating to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea .	
Chronic Effects	No human chronic effects known .	
Target Organ Effects	None known.	
Aggravated Medical Conditions	Respiratory disorders. Skin disorders.	
Potential Environmental Effects	See Section 12 for additional Ecological information	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Acrylic copolymer, sulfonated	4236291-40-5
Tetrapotassium pyrophosphate	7320-34-5
2-Phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	111951-31-6
Potassium tolytriazole	64665-53-8
Tripotassium orthophosphate	7778-53-2

4. FIRST AID MEASURES

General Advice	Avoid contact with skin, eyes and clothing.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes . Get medical attention immediately.
Skin Contact	Remove/Take off immediately all contaminated clothing. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
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	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	> 200°F / > 93°C	Method	Seta closed cup
Autoignition Temperature	No information available		
Flammability Limits in Air Hydrogen		Upper 75	Lower 4
Suitable Extinguishing Media	Carbon dioxide (CO2). Foam. Alcohol-resistant foam . Water spray. Dry powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Specific Hazards Arising from the Chemical	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 2	Flammability	1 Instability 0
HMS	Health 2	Flammability	1 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation.
Environmental Precautions	Prevent further leakage or spillage if safe to do so
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite)

Methods for Cleaning Up and transfer to a container for disposal according to local / national regulations (see section 13)
 Neutralizing Agent Pick up and transfer to properly labelled containers.
 Neutralize with hydrochloric acid

7. HANDLING AND STORAGE

Handling Keep away from open flames, hot surfaces and sources of ignition.
 Storage Keep in a dry, cool and well-ventilated place. Do not freeze. Keep container tightly closed. Keep out of the reach of children.
 Storage Temperature Minimum 35°F / 2°C Maximum 120°F / 49°C
 Storage Conditions Indoor X Outdoor X Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Component	ACGIH TLV	OSHA PEL	NIOSH
Acrylic copolymer, sulfonated	No data available	no data available	no data available
Tetrapotassium pyrophosphate	No data available	no data available	no data available
2-Phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	No data available	no data available	no data available
Potassium tolyltriazole	No data available	no data available	no data available
Tripotassium orthophosphate	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.
 Skin Protection Impervious gloves.
 Respiratory Protection In case of inadequate ventilation wear respiratory protection.
 General Hygiene Considerations 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 - Amber	Odor	Sweet
Appearance	Transparent	pH	12.4
Specific Gravity	1.21	Bulk Density	No data available
Evaporation Rate	0.42 (Butyl acetate=1)	Percent Volatile (Volume)	83
VOC Content (%)	0	Vapor Pressure	14.2 mmHg @ 70 °F
Vapor Density	0.6	Solubility	Completely soluble
Boiling Point/Range	>212°F / 100°C		

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions. Hazardous polymerization does not occur .
 Conditions to Avoid Heat, flames, and sparks.
 Incompatible Products Strong oxidizing agents. Acids. Alkali metals. Light and/or alkaline metals.
 Hazardous Decomposition Products Carbon oxides. Hydrogen. Phosphorus compounds.
 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
Acrylic copolymer, sulfonated	no data available	no data available	no data available	no data available	no data available
Tetrapotassium pyrophosphate	no data available	4640 mg/kg (Rabbit)	no data available	no data available	no data available
2-Phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	no data available	no data available	no data available	no data available	no data available
Potassium tolyltriazole	no data available	no data available	no data available	no data available	no data available
Tripotassium orthophosphate	2000 mg/kg (Rat)	4640 mg/kg (Rabbit)	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Acrylic copolymer, sulfonated	no data available	no data available	no data available	no data available	no data available
Tetrapotassium pyrophosphate	no data available	no data available	no data available	no data available	no data available
2-Phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	no data available	no data available	no data available	no data available	no data available
Potassium tolyltriazole	no data available	no data available	no data available	no data available	no data available
Tripotassium orthophosphate	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

There are no known carcinogenic chemicals in this product

Component	ACGIH	IARC	NTP	OSHA	Other
Acrylic copolymer, sulfonated	not applicable	not applicable	not applicable	not applicable	not applicable
Tetrapotassium pyrophosphate	not applicable	not applicable	not applicable	not applicable	not applicable
2-Phosphonobutane-1,2,4-tricarboxylic	not applicable	not applicable	not applicable	not applicable	not applicable

acid, potassium salt					
Potassium tolylriazole	not applicable	not applicable	not applicable	not applicable	not applicable
Tripotassium orthophosphate	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information

Toxicity to Fish LC50 917.6 mg/L 96h
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Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Acrylic copolymer, sulfonated	no data available	no data available	no data available	no data available	N/A
Tetrapotassium pyrophosphate	no data available	LC50> 100 mg/L Oncorhynchus mykiss 96 h	no data available	EC50 > 100 mg/L 48 h	N/A
2-Phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	no data available	no data available	no data available	no data available	N/A
Potassium tolylriazole	no data available	no data available	no data available	no data available	N/A
Tripotassium orthophosphate	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 Do not re-use empty containers

14. TRANSPORT INFORMATION

DOT Not regulated
 TDG Not regulated
 ICAO Not regulated
 IATA Not regulated
 IMDG/IMO Not regulated

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 Title 40n 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	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Acrylic copolymer, sulfonated	Not applicable	Not applicable
Tetrapotassium pyrophosphate	Not applicable	Not applicable
2-Phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	Not applicable	Not applicable
Potassium tolylriazole	Not applicable	Not applicable
Tripotassium orthophosphate	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
 D2B Toxic materials .



16. OTHER INFORMATION

Prepared By Dan Hollas
 Supersedes Date 06/17/2005

Issuing Date	06/13/2008
Reason for Revision	No information available
Glossary	No information available
List of References	No information available

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Gage, Hannah

From: Gilliam, Allen
Sent: Wednesday, November 16, 2011 7:46 AM
To: 'tim.barry@st-ji.com'
Subject: FW: Cooling Tower

Tim,

Thanks for the lady's name.

I believe it was Corbett Calhoun (back near the cooling towers?) that said, "the quench cooling tower water was batch discharged about 3 weeks ago". The fact that the quench tank's cooling tower water is discharged only 2 or 3 years is something that will be addressed in the final inspection I'm wrapping up. I'll have to wait on ADEQ's lab results which may take another week or so before I can send the final report.

Communications will have to be improved between person(s) involved with the cooling tower discharges and the person signing the semi-annual reports.

As discussed during the site visit you'll have to keep up with the production over the period in which there is no discharge from the cooling tower. Then add all the production over that period to convert (like I showed you on paper in your office) to equivalent concentration limits using that 3,500 ft³ volume.

Can I take the 3,500 ft³ as a "for sure" known? That would equal 26,182 gallons.

On the last site visit I conducted with Greg, he said there was daily "blow-downs" (~900 gpd) from the quench tank's cooling tower. Was he mistaken in that statement also?

Allen g

From: Barry Tim [<mailto:tim.barry@st-ji.com>]
Sent: Tuesday, November 15, 2011 2:08 PM
To: Gilliam, Allen
Subject: Cooling Tower

Hello Allen-I tried to call you but no one picked up.

The gal you talked to at the Quench tank is Carolyn Cline. She is the area leader.

The Cooling tower for the Quench water contains approximately 3500 cubic ft of water and is only drained if there is a maintenance requirement for such.

I remember it being drained during our Xmas shutdown approx. 7 years ago. I do not believe it has been drained since

Hope all is well-Tim

Tim BARRY
EHS Coordinator

Saint Jean Industries Inc
Innovative Solutions

424 Industrial Park Road
AR 72543 - Heber Springs - United States of America
Tel :501-362-9500
Mob: 501.887.6304

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Gage, Hannah

From: Gilliam, Allen
Sent: Friday, November 18, 2011 2:51 PM
To: 'tim.barry@st-ji.com'
Subject: FW: Saint Jean CAV 11_11 (2) Draft ADEQ Report 11-17-11

Tim,

I certainly appreciate YOUR patience and cooperativeness in straightening out your regulated wastewater discharge volume and frequency. This issue should have been rectified years ago before either you or I arrived in the current picture.

If you believe sampling the quench cooling tower's vault would provide the most representative samples of your wastewater discharged to the City (you would only have to sample when you discharge to the City), then that would be the place. It IS well mixed and homogenous, yes?

In that case, the only advice I would give is to guard against contamination by using a Teflon sampling extension handle (if necessary to reach down into the vault) with a Teflon gimbaled sampling "cup" (keeping it level) on the end for grabbing equally time-spaced samples over the discharge period of the cooling tower. The sampling equipment should be cleaned with de-I water (or at least rinsed thoroughly with distilled water) and stored in a clean environment.

These equally time-spaced grab samples can be field composited (for only the metals and cyanide) or all sent to the lab for them to composite for one analytical result.

Your O & G samples cannot be composited and have to be captured in the lab-provided glass bottles. In other words, you cannot transfer a sample from the gimbaled Teflon "cup" to the glass sample container. You would have to figure out how to attach them to the Teflon rod, keeping the bottle upright to get enough wastewater into the bottle for the lab to sample. As I did during this last site visit, I added the preservative (sulfuric acid) after you grabbed the sample.

Again, I very much appreciate your patience and cooperativeness in helping to figure out your regulated wastewater discharge frequency and volume.

Allen Gilliam
ADEQ State Pretreatment Coordinator
501.682.0625

From: Barry Tim [<mailto:tim.barry@st-ji.com>]
Sent: Friday, November 18, 2011 11:09 AM
To: Gilliam, Allen
Subject: RE: Saint Jean CAV 11_11 (2) Draft ADEQ Report 11-17-11

Allen-This has been an education for both of us. I appreciate your patience and your process improvement thoughts.

The Cooling Tower Quench tank/vault (24,000+gal) if need be can be open via a top hatch on the vault roof if we have to sample the water. I guess this would be most representative of potential contaminants over time.

I will sample wherever you recommend. I will get the SA Letter to you early next week. TX Tim

Tim BARRY
EHS Coordinator

Saint Jean Industries Inc
Innovative Solutions
424 Industrial Park Road
AR 72543 - Heber Springs - United States of America
Tel :501-362-9500
Mob: 501.887.6304

From: Gilliam, Allen [<mailto:GILLIAM@adeq.state.ar.us>]
Sent: Friday, November 18, 2011 10:45 AM
To: Barry Tim
Subject: Saint Jean CAV 11_11 (2) Draft ADEQ Report 11-17-11

Tim,

Thank you for taking the time to review my draft report and make necessary revisions to the confusing regulated flow discharges that were left unclear after my visit at your facility last week.

I will only be able to write in (not type) corrections to the first page since that is the page with our signatures on it.

I will incorporate your comments/corrections into the final report and address the findings of the compliance assurance visit (CAV) in the cover letter.

It would probably be a good idea to leave instructions on how to calculate your facility's equivalent concentration limits based on the production over that "7 to 10 year discharge" period. That's going to mean ALOT of production with a relatively small volume of wastewater generated causing your equivalent concentration limits to be very high.

And, as previously discussed, until there is a discharge to the City's sewer system your "semi-annual reports" can just state "There has been no regulated wastewater discharged to the City's sewer system during this 6 month reporting period." along with a signed certification statement "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

If I'm reading your revisions correctly ["The heat treat quench bath contact water (approx.1000gallon) is recirculated through the above-noted dedicated cooling tower closed system and is continually re-circulated until it is determined the bath water needs to be completely changed out (every several months). If the heat treat bath water (approx.1000 gallons) requires emptying (maintenance) it is either sent back to the dedicated cooling tower vault via plumbing/or boiled off via the site evaporator system."] there is NO direct discharge from that quench tank/pit of that 1,000 gallons to the city's sewer system, right?

Would you still agree to sampling the quench tank/pit wastewater when the cooling tower has to be discharged even after "7 to 10 years"? Per our conversations, it would be difficult (and cost prohibitive) to sample the dedicated cooling tower "wastewater" being discharged since it is underground-connected to the City's sewer system, correct?

Thanks for helping to straighten out your regulated discharge practices.

Sincerely,

Allen Gilliam
ADEQ State Pretreatment Coordinator
501.682.0625

From: Barry Tim [<mailto:tim.barry@st-ji.com>]
Sent: Friday, November 18, 2011 6:31 AM
To: Gilliam, Allen
Subject: Saint Jean CAV 11_11 (2) Draft ADEQ Report 11-17-11

Hello Allen-Comments/updates highlighted in yellow

TX Tim
Tim BARRY
EHS Coordinator

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Mob: 501.887.6304

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