



# **APPENDIX F**

## **Spill Report Forms**

**SPILL REPORT**

Date of Report : July 17, 2014 Time: 9:30 am  
Wind Direction: N/A Weather: Clear  
Shift Supervisor: \_\_\_\_\_ Name of Others Involved: \_\_\_\_\_  
Reported To: J. Delaney Date and Time of Spill: 7/16/2014; time unknown  
Duration of the Spill: Unknown Material Spilled: Hydraulic Fluid

Quantity of Material Spilled: 8 liters (approximate)

MATERIAL CLEANED-UP WAS LINED WITH WATER & CONTAINED IN PLASTIC TRASH BIN. WATER ORIGINATED FROM FEED CHUTE WATER DROPLET

Description of Spill: Approximately 8 liters of hydraulic fluid spilled into the Unit 2 Riddling Chute from a loose hydraulic hose fitting on the Unit 2 Stoker Feed Table drive unit during commissioning of the Feed Table Drive System on 7/16/2014. The system was secured and the loose hose fitting repaired. The hydraulic fluid spilled from the Riddling Chute onto the Unit 2 Air Preheater ductwork and the concrete floor below. The spill was not noticed until the morning of 7/17/2014 at which time Covanta was notified of the spill by CPP. CPP immediately organized a crew to clean-up the oil.

Did Material Escape into the Environment: NO. If yes, where? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Method of Clean up: Material was cleaned with oil absorbent, absorbent mats, rags and a wet vac.

Method of Disposal: Material staged for disposal by Detox.

Material Used from Spill Kits or Stores for Clean-up to be reordered:

What Caused the Spill? The spill came from a loose hydraulic fitting on the Unit 2 Feed Table drive unit.

Corrective Actions: The hose fitting was tightened and the hydraulic fluid cleaned-up.

Shift Supervisor \_\_\_\_\_ Date \_\_\_\_\_  
Chief Engineer \_\_\_\_\_ Date \_\_\_\_\_  
Environmental Specialist \_\_\_\_\_ Date \_\_\_\_\_  
Facility Manager \_\_\_\_\_ Date \_\_\_\_\_

Prepared By:

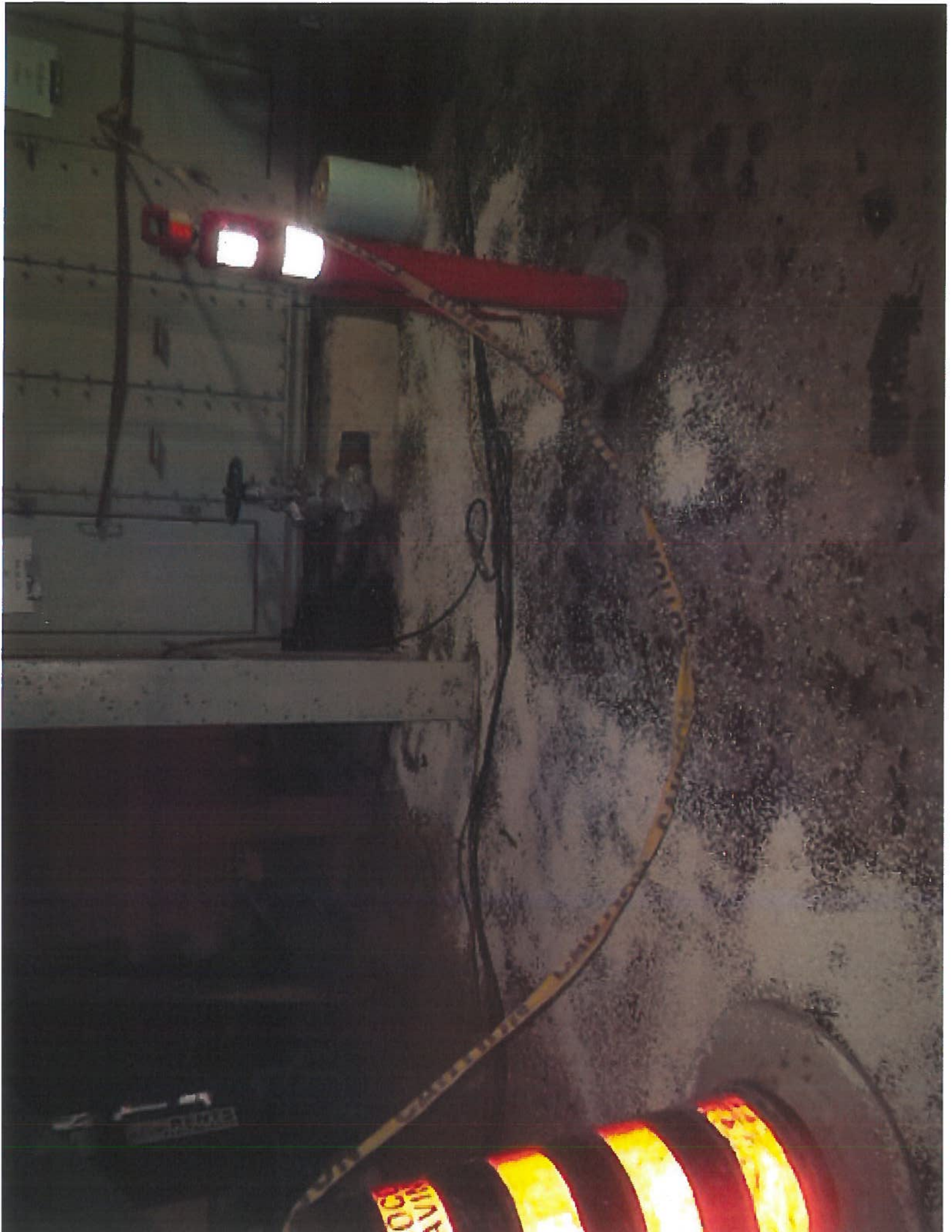
*James Delaney*  
JAMES DELANEY

13 July 2014











# MOVEMENT DOCUMENT / MANIFEST DOCUMENT DE MOUVEMENT / MANIFESTE

This Movement document/manifest conforms to all federal and provincial transport and environmental legislation.  
Ce document de mouvement/manifeste est conforme aux législations fédérale et provinciale sur l'environnement et le transport.

<b>A Generator / consigneur / Producteur / expéditeur</b> Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial <b>0N6351104</b>		<b>B Carrier / Transporteur</b> Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial <b>AB4084</b>	
Company name / Nom de l'entreprise <b>RENAIDAN CONTRACTING LTD.</b>		Company name / Nom de l'entreprise <b>DETOX ENVIRONMENTAL LTD.</b>	
Mailing address / Adresse postale City / Ville <b>100 SCOTIA COURT</b> <b>WHITBY ON</b>		Mailing address / Adresse postale City / Ville <b>322 BENNETT ROAD</b> <b>BOWMANVILLE ON</b>	
E-mail / Courriel électronique <b>JIM DELANEY</b> Tel. No. / N° de tél. ( ) <b>905-213-9400</b>		E-mail / Courriel électronique <b>INFO@DETOXENVIRONMENTAL.COM</b> Tel. No. / N° de tél. ( ) <b>905-623-1367</b>	
Shipping site address / Adresse du lieu deexpédition <b>72 OSBOURNE ROAD</b> City / Ville <b>COURTICE ONTARIO</b>		Shipping site address / Adresse du lieu de destination <b>322 BENNETT ROAD</b> City / Ville <b>BOWMANVILLE ONTARIO</b>	
Intended Receiver / consignee / Réceptionnaire / destinataire prévu <b>DETOX ENVIRONMENTAL LTD.</b> Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial <b>A390323</b>		Intended Receiver / consignee / Réceptionnaire / destinataire <b>DETOX ENVIRONMENTAL LTD.</b> Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial <b>L1E 178</b>	
Mailing address / Adresse postale City / Ville <b>P.O. BOX 458</b> <b>BOWMANVILLE ON</b>		Mailing address / Adresse postale City / Ville <b>L1C 3E2</b> <b>ON</b>	
E-mail / Courriel électronique <b>INFO@DETOXENVIRONMENTAL.COM</b> Tel. No. / N° de tél. ( ) <b>905-623-1367</b>		E-mail / Courriel électronique <b>INFO@DETOXENVIRONMENTAL.COM</b> Tel. No. / N° de tél. ( ) <b>905-623-1367</b>	
Receiving site address / Adresse du lieu de destination <b>322 BENNETT ROAD</b> City / Ville <b>BOWMANVILLE ONTARIO</b>		Receiving site address / Adresse du lieu de destination <b>322 BENNETT ROAD</b> City / Ville <b>BOWMANVILLE ONTARIO</b>	

\* COPY HANDED TO ENVIRONMENTAL MANAGER  
 1/2 REPORTING PERIOD BY A. WILSON ON 7.29.2014  
**PC45073-6**

Reference Nos. of other movement documents / Manifest(s) used / N° de référence des autres documents de mouvement/manifestés utilisés 21		Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial 22	
Receiver / consignee information same as in Part A Les renseignements du réceptionnaire / destinataire sont les mêmes qu'à la Partie A Yes / Oui <input type="checkbox"/> No, complete the box below / Non, remplir la case ci-dessous		Receiver / consignee information same as in Part A Les renseignements du réceptionnaire / destinataire sont les mêmes qu'à la Partie A Yes / Oui <input type="checkbox"/> No, complete the box below / Non, remplir la case ci-dessous	
Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville E-mail / Courriel électronique Receiving site address / Adresse du lieu de destination 23		Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville E-mail / Courriel électronique Receiving site address / Adresse du lieu de destination 23	
Date received / Date de réception Year / Année Month / Mois Day / Jour Time / Heure A.M. <input type="checkbox"/> P.M. <input type="checkbox"/>		Date received / Date de réception Year / Année Month / Mois Day / Jour Time / Heure A.M. <input type="checkbox"/> P.M. <input type="checkbox"/>	
If waste or recyclable material to be transferred, specify intended company name / Si les déchets ou matériaux recyclables doivent être transférés, préciser le nom du destinataire 24		If waste or recyclable material to be transferred, specify intended company name / Si les déchets ou matériaux recyclables doivent être transférés, préciser le nom du destinataire 24	
Quantity received / Quantité reçue Units / Unités L or / ou kg 25		Quantity received / Quantité reçue Units / Unités L or / ou kg 25	
Packing / risk gr. / Gr. d'emballage / de risque 26		Packing / risk gr. / Gr. d'emballage / de risque 26	
UN No. / N°NU 27		UN No. / N°NU 27	
Shipping name / Appellation réglementaire <b>WASTE NOT REGULATED BY T08. (OIL AND ABSORBENT)</b>		Shipping name / Appellation réglementaire <b>WASTE NOT REGULATED BY T08. (OIL AND ABSORBENT)</b>	
Notice No. / N° de notification 28		Notice No. / N° de notification 28	
SPECIAL HANDLING / EMERGENCY INSTRUCTIONS DETOX ENVIRONMENTAL LTD. 24 HOUR NUMBER 1-905-623-1367 "THE FOLLOWING EQUIVALENCY PERMITS APPLY" <input type="checkbox"/> EQUIVALENCY CERTIFICATE NO. 51 (319/01) (1) <input type="checkbox"/> EQUIVALENCY CERTIFICATE NO. 50 (6696 (REN-15)) <input type="checkbox"/> EQUIVALENCY CERTIFICATE NO. 50 (9943 (REN. 2)) MOE SPILLS ACTION CENTER 1-800-268-6050		SPECIAL HANDLING / EMERGENCY INSTRUCTIONS DETOX ENVIRONMENTAL LTD. 24 HOUR NUMBER 1-905-623-1367 "THE FOLLOWING EQUIVALENCY PERMITS APPLY" <input type="checkbox"/> EQUIVALENCY CERTIFICATE NO. 51 (319/01) (1) <input type="checkbox"/> EQUIVALENCY CERTIFICATE NO. 50 (6696 (REN-15)) <input type="checkbox"/> EQUIVALENCY CERTIFICATE NO. 50 (9943 (REN. 2)) MOE SPILLS ACTION CENTER 1-800-268-6050	
Generator / consigneur certification: I certify that the information contained in Part A is correct and complete. Attestation du producteur / expéditeur: J'atteste que tous les renseignements à la partie A sont exacts et complets.		Generator / consigneur certification: I certify that the information contained in Part A is correct and complete. Attestation du producteur / expéditeur: J'atteste que tous les renseignements à la partie A sont exacts et complets.	
Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) <b>JAMES DEANEY</b> Signature <b>JAMES DEANEY</b>		Name of authorized person (print) / Nom de l'agent autorisé (caractères d'imprimerie) <b>JAMES DEANEY</b> Signature <b>JAMES DEANEY</b>	
Date shipped / Date d'expédition Year / Année Month / Mois Day / Jour Time / Heure A.M. <input type="checkbox"/> P.M. <input type="checkbox"/>		Date shipped / Date d'expédition Year / Année Month / Mois Day / Jour Time / Heure A.M. <input type="checkbox"/> P.M. <input type="checkbox"/>	
Scheduled arrival date / Date d'arrivée prévue Year / Année Month / Mois Day / Jour Time / Heure A.M. <input type="checkbox"/> P.M. <input type="checkbox"/>		Scheduled arrival date / Date d'arrivée prévue Year / Année Month / Mois Day / Jour Time / Heure A.M. <input type="checkbox"/> P.M. <input type="checkbox"/>	

14 JUL 29 10:07 AM '14  
 29 JULY 2014  
 Retained by Consignor (Generator) - Gardée par l'expéditeur  
 MOE 04-1917 (12/13)

**SPILL REPORT**

Date of Report November 11, 2014 Time 9:10 am  
Wind Direction \_\_\_\_\_ Weather Clear, Cool  
Shift Supervisor J. Otis Name of Others Involved R. Peers, L. Turner (CPP)  
Reported To J. Delaney Date and Time of Spill 11/11/2014  
Unknown - occurred sometime Between 8:10 and 8:40 am  
Duration of the Spill between 8:10 and 8:40 am Material Spilled Boiler Boil Out Chemicals  
Quantity of Material Spilled 100 gallons (estimated) Water Mixture with  
ChemTreat BL1283 @ <4%  
ChemTreat CT23 @ 2%

Did Material Escape into the Environment Yes If yes Where? The water/chemical mixture  
was absorbed into the ground directly under the Frac Tank. There were no  
visible signs of any water flowing to catch basins, swales or beyond the spill zone.

Method of Clean up To be determined once the Frac Tank is moved and the area  
inspected further. Golder Associates will be on Site at 8:30 am on 11/12 to  
to assess the area for further action.

Method of Disposal To be determined once the Frac Tank is moved and the area  
inspected further.

Material Used from Spill Kits or Stores for Clean-up to be reordered N/A

What Caused the Spill? Fill hose located on top of Frac Tank moved as the elevation  
in the tank rose and water sprayed to the ground.

Corrective Actions Hose was secured and tied-off so it could not come free.  
The ph of the East Pond was checked and found to be 8.5; this will be  
monitored further to ensure no impact beyond the spill zone.

Was the MOE contacted? (Spills Action Centre 1-800-268-6060) Yes

If so When? 1:05 pm

By Whom? J. Delaney

MOE Reference #: 7563-9QRPCS (Contacted John Lock)

Mr. Lock advised he would advise the local MOE office tomorrow  
as the office was closed for Remembrance Day. He further  
asked that we call back once the clean-up is complete of if  
there are further developments.

**SPILL REPORT**

Was a Waste Hauler used? No - Detox Environmental was contacted and will be called in once the Frac Tank is removed.

Where was the waste taken? TBD

Shift Supervisor \_\_\_\_\_ Date \_\_\_\_\_

Chief Engineer \_\_\_\_\_ Date \_\_\_\_\_

Environmental Specialist \_\_\_\_\_ Date \_\_\_\_\_

Facility Manager \_\_\_\_\_ Date \_\_\_\_\_

Prepared By:  Date: 11/10/2014

Contacts:  
Golder Associates  
Steve Auger  
(cell) 416.986.9713  
Steve\_Auger@golder.com

Detox Environmental  
Chris Morrison  
905.623.1367  
cmorrison@detoxinvironmental.com



# MATERIAL SAFETY DATA SHEET

## Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat BL1283
Product Use:	Boiler Water Treatment
Supplier's Name:	ChemTreat International, Inc. - Canada
Emergency Telephone Number:	(800) 424-9300 (Toll Free) (703) 527-3887
Address (Corporate Headquarters):	4461 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800) 648-4579
Date of MSDS:	5 January 2011

## Section 2. Hazard(s) Identification



Signal Word:	<b>WARNING!</b>
Hazard Statement(s):	Causes eye irritation. Causes skin irritation. Harmful if inhaled. Harmful if swallowed.
Precautionary Statement(s):	No significant health risks are expected from exposures under normal conditions of use.

## Section 3. Composition/Hazardous Ingredients

Component	CAS #	Conc
Diethylhydroxylamine	3710-84-7	15 - 40

## Section 4. First Aid Measures

Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
Skin:	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation occurs, seek medical advice/attention.
Ingestion:	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON



Notes to Physician: CENTER or doctor/physician.  
N/A  
Additional First Aid Remarks: N/A

## ***Section 5. Fire Fighting Measures***

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**Flammability of the Product:** Product does not sustain combustion.  
**Suitable Extinguishing Media:** Use extinguishing media suitable to surrounding fire.  
**Specific Hazards Arising from the Chemical:** Vapour is heavier than air.  
Product emits toxic gases or fumes under fire conditions.  
**Protective Equipment:** If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

## ***Section 6. Accidental Release Measures***

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**Personal Precautions:** Use appropriate Personal Protective Equipment (PPE).  
**Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.  
**Methods for Cleaning up:** Contain and recover liquid when possible. Flush spill area with water spray.  
**Other Statements:** None.

## ***Section 7. Handling and Storage***

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**Handling:** Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapours, mist or dust.  
**Storage:** Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only. Protect from heat and sources of ignition.

## **Section 8. Exposure Controls/Personal Protection**

### **Exposure Limits**

Component	Source	Exposure Limits
Diethylhydroxylamine		N/E

### **Carcinogenicity Category**

Component	Code 1	Code 2	Ref Description
Diethylhydroxylamine			N/E

### **Engineering Controls:**

Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

### **Personal Protection**

#### **Eyes:**

Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

#### **Skin:**

Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

#### **Respiratory:**

If misting occurs, use NIOSH approved organic vapour/acid gas dual cartridge respirator with a dust/mist prefilter.

## **Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance:</b>	Liquid, Light Straw, Clear
<b>Specific Gravity:</b>	0.999 @ 20°C
<b>pH:</b>	11.3 @ 20°C, 100.0%
<b>Freezing Point:</b>	-10°C
<b>Flash Point:</b>	53.9°C
<b>Odour:</b>	Mild
<b>Melting Point:</b>	N/A
<b>Boiling Point:</b>	N/D
<b>Solubility in Water:</b>	Complete
<b>Evaporation Rate:</b>	N/D
<b>Vapour Density:</b>	N/D
<b>Molecular Weight:</b>	N/D
<b>Viscosity:</b>	N/A
<b>Flammable Limits:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Density:</b>	8.33 lb/ga
<b>Vapour Pressure:</b>	N/D
<b>% VOC</b>	25.5



## ***Section 10. Stability and Reactivity***

<b>Chemical Stability:</b>	Stable at normal temperatures and pressures.
<b>Incompatibility with Various Substances:</b>	Strong oxidizers, Strong acids
<b>Hazardous Decomposition Products:</b>	Oxides of carbon, Oxides of nitrogen
<b>Possibility of Hazardous Reactions:</b>	None known.

## ***Section 11. Toxicological Information***

Chemical Name	Route	LD50	LC50	Species
Diethylhydroxylamine	Oral	LD50	2190 mg/kg	Rat
	Dermal	LD50	1300 mg/kg	Rabbit

**Comments:** None.

## ***Section 12. Ecological Information***

Species	Duration	LC50	Concentration
Fathead Minnow	96h	LC50	>1000 mg/l
Ceriodaphnia dubia	48h	LC50	87.6 mg/l

**Comments:** None.

## ***Section 13. Disposal Considerations***

Incinerate or bury in approved landfill. There may be additional local or provincial requirements relating to the disposal of waste. Consult provincial or local regulations regarding the proper disposal of this material. Refer to Transportation of Dangerous Goods (T.D.G.) classifications.

U.S. EPA: Ignitibility characteristic hazardous waste D001 when disposed of in the original product form.

## Section 14. Transport Information

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### TDG Classification

**TDG Name:** COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID  
**Technical Name:** N/A  
**Hazard Class:** Not T.D.G. Regulated  
**UN/NA#:** N/A  
**Packing Group:** N/A

## Section 15. Regulatory Information

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### Inventory Status

**United States (TSCA):** All ingredients listed.  
**Canada (DSL/NDSL):** All ingredients listed.

### Federal Regulations

#### SARA Title III Rules

##### Sections 311/312 Hazard Classes

**Fire Hazard:** Yes  
**Reactive Hazard:** No  
**Release of Pressure:** No  
**Acute Health Hazard:** Yes  
**Chronic Health Hazard:** No

#### Other Sections

Section 311/312 Hazard Class	Section 311/312 Hazard Class	Section 311/312 Hazard Class
Section 311/312 Hazard Class	Section 311/312 Hazard Class	Section 311/312 Hazard Class
Diethylhydroxylamine	N/A	N/A

### State Regulations

**California Proposition 65:** None known.

#### Special Regulations

State	State
Diethylhydroxylamine	None



**International Regulations**

**Canada**

**WHMIS Classification:** D2B (Toxic Material)  
B3 (Combustible Liquid)

**Controlled Product Regulations (CPR):**

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.

**Section 16. Other Information**

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**HMIS Hazard Rating**

**Health:** 1  
**Flammability:** 2  
**Physical Hazard:** 0  
**PPE:** X

**Notes:**

The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.  
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

**NSF:** N/A

**FDA:** N/A

**KOSHER:** This product is certified by the Orthodox Union as kosher pareve. Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

**FIFRA:** N/A

**Other:** None

### Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Regulatory Affairs Department

### *Disclaimer*

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Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, ChemTreat, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will ChemTreat, Inc. be responsible for damages of any nature whatsoever resulting from the use or reliance upon information. No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature are made hereunder with respect to information or the product to which information refers.



# **MATERIAL SAFETY DATA SHEET**

## **Section 1. Chemical Product and Company Identification**

<b>Product Name:</b>	ChemTreat CT23
<b>Product Use:</b>	Boiler Boilout Treatment
<b>Supplier's Name:</b>	ChemTreat International, Inc. - Canada
<b>Emergency Telephone Number:</b>	(800) 424-9300 (Toll Free) (703) 527-3887
<b>Address (Corporate Headquarters):</b>	4461 Cox Road Glen Allen, VA 23060
<b>Telephone Number for Information:</b>	(800) 648-4579
<b>Date of MSDS:</b>	7 January 2011

## **Section 2. Hazard(s) Identification**



<b>Signal Word:</b>	<b>DANGER!</b>
<b>Hazard Statement(s):</b>	Causes severe skin burns and eye damage. Causes serious eye damage. Harmful in contact with skin. Harmful if inhaled. Harmful if swallowed.
<b>Precautionary Statement(s):</b>	Wear protective gloves/clothing and eye/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area.

## **Section 3. Composition/Hazardous Ingredients**

<b>Component</b>	<b>CAS Registry #</b>	<b>Wt.%</b>
Potassium hydroxide	1310-58-3	7 - 13
Tetrapotassium pyrophosphate	7320-34-5	1 - 5

## ***Section 4. First Aid Measures***

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<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>Eyes:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
<b>Skin:</b>	Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a poison center or doctor/physician.
<b>Ingestion:</b>	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.
<b>Notes to Physician:</b>	N/A
<b>Additional First Aid Remarks:</b>	N/A

## ***Section 5. Fire Fighting Measures***

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<b>Flammability of the Product:</b>	Not flammable.
<b>Suitable Extinguishing Media:</b>	Use extinguishing media suitable to surrounding fire.
<b>Specific Hazards Arising from the Chemical:</b>	None known.
<b>Protective Equipment:</b>	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

## ***Section 6. Accidental Release Measures***

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<b>Personal Precautions:</b>	Use appropriate Personal Protective Equipment (PPE).
<b>Environmental Precautions:</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
<b>Methods for Cleaning up:</b>	Contain and recover liquid when possible. Flush spill area with water spray.
<b>Other Statements:</b>	None.

## Section 7. Handling and Storage

- Handling:** Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapours, mist or dust.
- Storage:** Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.

## Section 8. Exposure Controls/Personal Protection

### Exposure Limits

Component	Source	Exposure Limits*
Potassium hydroxide	ACGIH TLV	2 mg/m <sup>3</sup> Ceiling
Tetrapotassium pyrophosphate		N/E

### Carcinogenicity Category

Component	Source	Code	Brief Description
Potassium hydroxide			N/E
Tetrapotassium pyrophosphate			N/E

- Engineering Controls:** Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

### Personal Protection

- Eyes:** Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.
- Skin:** Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.
- Respiratory:** If misting occurs, use NIOSH approved organic vapour/acid gas dual cartridge respirator with a dust/mist prefilter.



## ***Section 9. Physical and Chemical Properties***

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<b>Physical State and Appearance:</b>	Liquid, Light Smoke, Cloudy
<b>Specific Gravity:</b>	1.118 @ 20°C
<b>pH:</b>	14.0 @ 20°C, 100.0%
<b>Freezing Point:</b>	-7.8°C
<b>Flash Point:</b>	N/D
<b>Odour:</b>	Mild
<b>Melting Point:</b>	N/A
<b>Boiling Point:</b>	>100°C
<b>Solubility in Water:</b>	Complete
<b>Evaporation Rate:</b>	As Water
<b>Vapour Density:</b>	As Water
<b>Molecular Weight:</b>	N/D
<b>Viscosity:</b>	N/A
<b>Flammable Limits:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Density:</b>	9.32 lb/ga
<b>Vapour Pressure:</b>	As Water
<b>% VOC</b>	0

## ***Section 10. Stability and Reactivity***

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<b>Chemical Stability:</b>	Stable at normal temperatures and pressures.
<b>Incompatibility with Various Substances:</b>	Strong oxidizers, Acids
<b>Hazardous Decomposition Products:</b>	Oxides of carbon
<b>Possibility of Hazardous Reactions:</b>	None known.

## ***Section 11. Toxicological Information***

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<b>Chemical Name</b>	<b>Exposure</b>	<b>Type of Effect</b>	<b>Concentration</b>	<b>Species</b>
Potassium hydroxide	Oral	LD50	365 mg/kg	Rat
Tetrapotassium pyrophosphate	Oral	LD50	2980 mg/kg	Rat
	Dermal	LD50	>7940 mg/kg	Rabbit

**Comments:** None.

## ***Section 12. Ecological Information***

<b>Species</b>	<b>Duration</b>	<b>Type of Effect</b>	<b>Test Results</b>
Fathead Minnow	96h	LC50	>1000 mg/l
Ceriodaphnia dubia	48h	LC50	>1000 mg/l

**Comments:** None.

## ***Section 13. Disposal Considerations***

Incinerate or bury in approved landfill. There may be additional local or provincial requirements relating to the disposal of waste. Consult provincial or local regulations regarding the proper disposal of this material. Refer to Transportation of Dangerous Goods (T.D.G.) classifications.

U.S. EPA: Corrosivity characteristic hazardous waste D002 when disposed of in the original product form.

## ***Section 14. Transport Information***

### **TDG Classification**

**TDG Name:** POTASSIUM HYDROXIDE SOLUTION  
**Technical Name:** N/A  
**Hazard Class:** Corrosive  
**UN/NA#:** UN1814  
**Packing Group:** PGII

## ***Section 15. Regulatory Information***

### **Inventory Status**

**United States (TSCA):** All ingredients listed.  
**Canada (DSL/NDSL):** All ingredients listed.

### **Federal Regulations**

#### **SARA Title III Rules**

#### **Sections 311/312 Hazard Classes**

**Fire Hazard:** No  
**Reactive Hazard:** No  
**Release of Pressure:** No  
**Acute Health Hazard:** Yes  
**Chronic Health Hazard:** No

**Other Sections**

Component	Health Hazard	Physical Hazard	REGLA RQ
Potassium hydroxide	N/A	N/A	1000
Tetrapotassium pyrophosphate	N/A	N/A	N/A

**State Regulations**

**California Proposition 65:** None known.

**Special Regulations**

Component	Special Regulations
Potassium hydroxide	MA, MN, NY, PA, WA
Tetrapotassium pyrophosphate	None

**International Regulations**

**Canada**

**WHMIS Classification:** D2B (Toxic Material)  
E (Corrosive Material)

**Controlled Product Regulations (CPR):** 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.

**Section 16. Other Information**

**HMIS Hazard Rating**

**Health:** 3  
**Flammability:** 0  
**Physical Hazard:** 1  
**PPE:** X

**Notes:** The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.  
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

**NSF:** N/A



**FDA:** N/A

**KOSHER:** This product is certified by the Orthodox Union as kosher pareve. Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

**FIFRA:** N/A

**Other:** None

**Abbreviations**

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

**Prepared by: Regulatory Affairs Department**

***Disclaimer***

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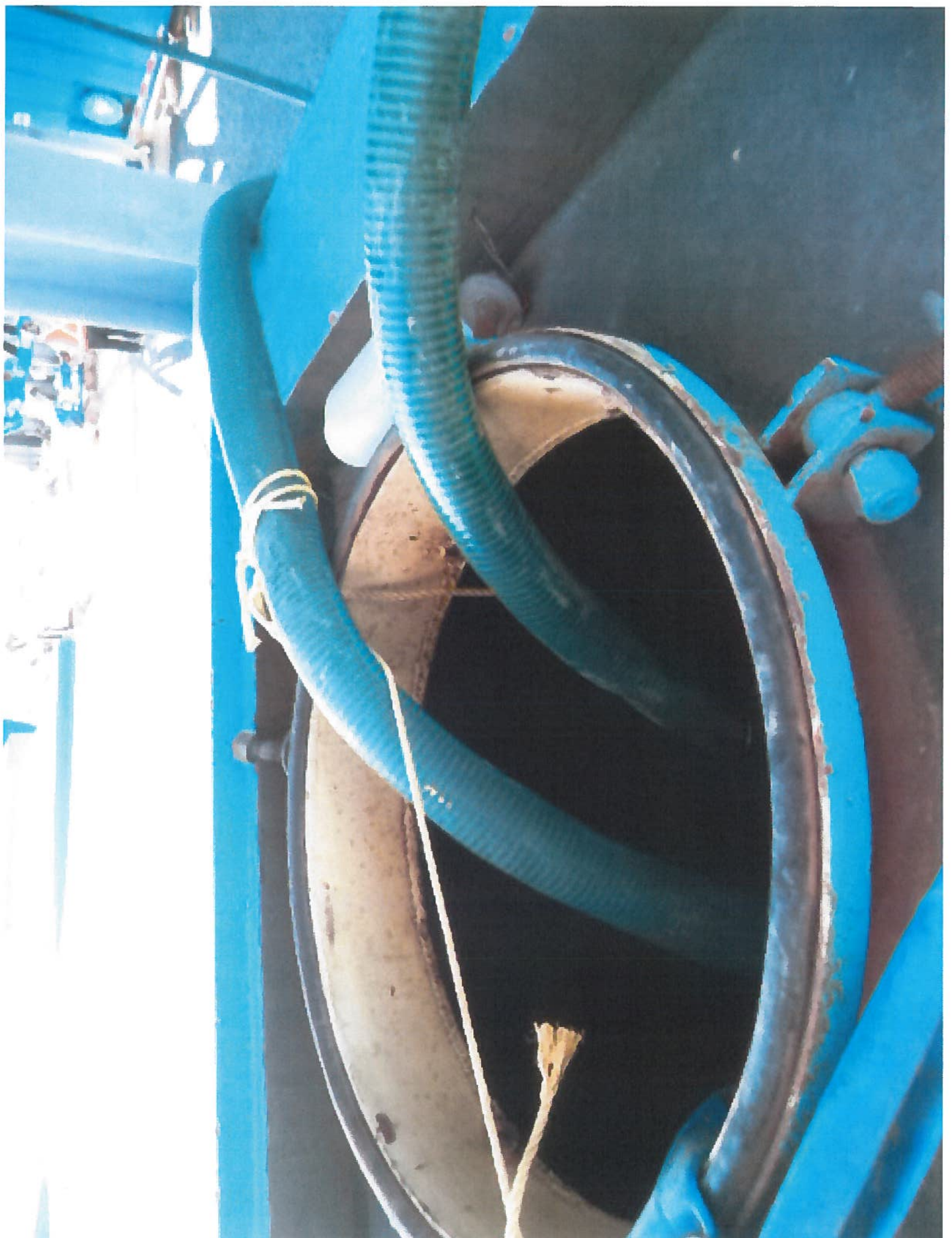






















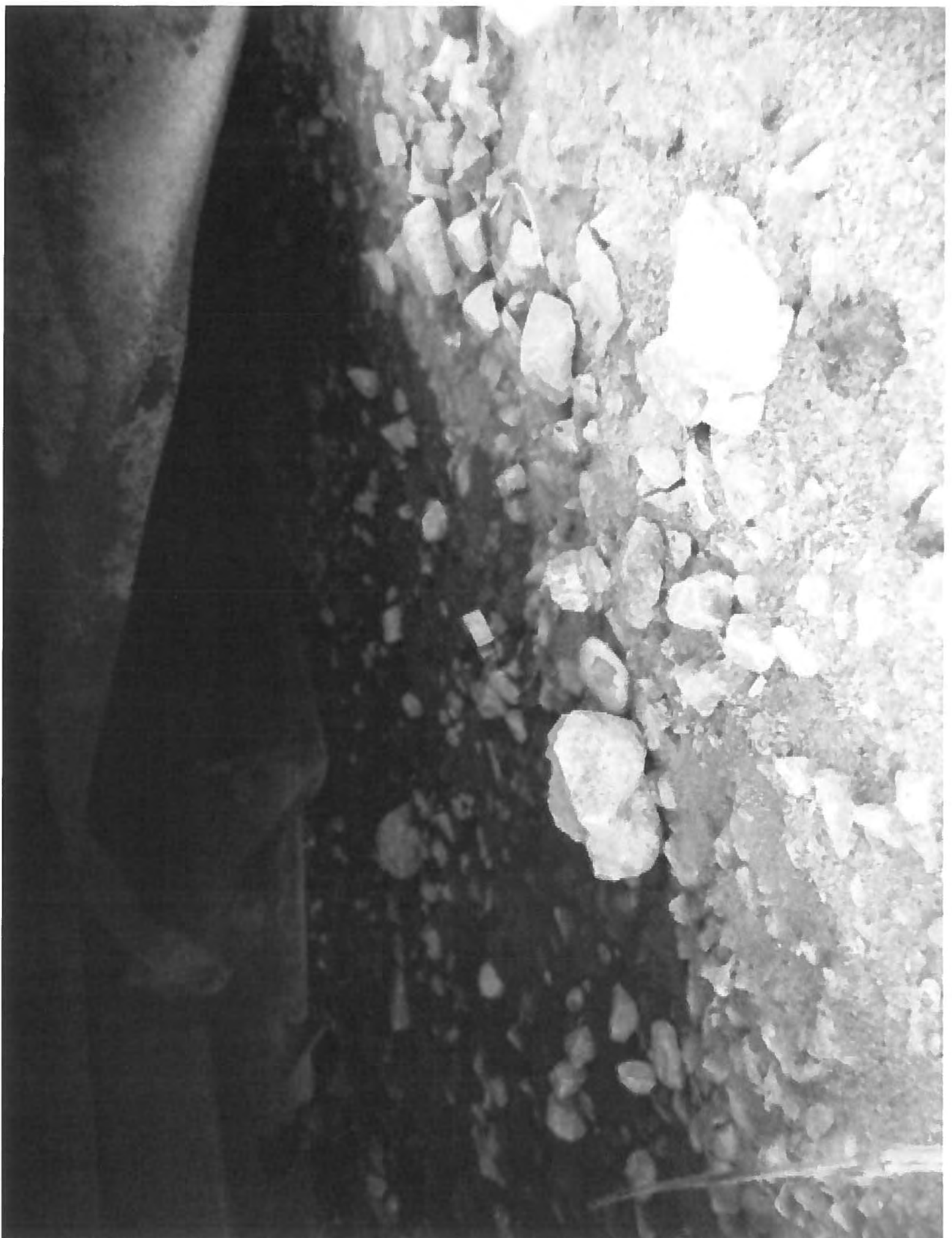












# MATERIAL SAFETY DATA SHEET

## Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat BL1283
Product Use:	Boiler Water Treatment
Supplier's Name:	ChemTreat International, Inc. - Canada
Emergency Telephone Number:	(800) 424-9300 (Toll Free) (703) 527-3887
Address (Corporate Headquarters):	4461 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800) 648-4579
Date of MSDS:	5 January 2011

## Section 2. Hazard(s) Identification



Signal Word: **WARNING!**

Hazard Statement(s):  
Causes eye irritation.  
Causes skin irritation.  
Harmful if inhaled.  
Harmful if swallowed.

Precautionary Statement(s):  
No significant health risks are expected from exposures under normal conditions of use.

## Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt. %
Diethylhydroxylamine	3710-84-7	15 - 40

## Section 4. First Aid Measures

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

**Eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Skin:** Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation occurs, seek medical advice/attention.

**Ingestion:** DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON



CENTER or doctor/physician.  
**Notes to Physician:** N/A  
**Additional First Aid Remarks:** N/A

### ***Section 5. Fire Fighting Measures***

---

**Flammability of the Product:** Product does not sustain combustion.  
**Suitable Extinguishing Media:** Use extinguishing media suitable to surrounding fire.  
**Specific Hazards Arising from the Chemical:** Vapour is heavier than air.  
Product emits toxic gases or fumes under fire conditions.  
**Protective Equipment:** If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

### ***Section 6. Accidental Release Measures***

---

**Personal Precautions:** Use appropriate Personal Protective Equipment (PPE).  
**Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.  
**Methods for Cleaning up:** Contain and recover liquid when possible. Flush spill area with water spray.  
**Other Statements:** None.

### ***Section 7. Handling and Storage***

---

**Handling:** Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapours, mist or dust.  
**Storage:** Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only. Protect from heat and sources of ignition.



## **Section 8. Exposure Controls/Personal Protection**

### **Exposure Limits**

Chemical	Source	Exposure Limits
Diethylhydroxylamine		N/E

### **Carcinogenicity Category**

Chemical	Source	Code	Reference
Diethylhydroxylamine			N/E

### **Engineering Controls:**

Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

### **Personal Protection**

#### **Eyes:**

Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

#### **Skin:**

Maintain quick-drench facilities in work area.  
Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

#### **Respiratory:**

If misting occurs, use NIOSH approved organic vapour/acid gas dual cartridge respirator with a dust/mist prefilter.

## **Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance:</b>	Liquid, Light Straw, Clear
<b>Specific Gravity:</b>	0.999 @ 20°C
<b>pH:</b>	11.3 @ 20°C, 100.0%
<b>Freezing Point:</b>	-10°C
<b>Flash Point:</b>	53.9°C
<b>Odour:</b>	Mild
<b>Melting Point:</b>	N/A
<b>Boiling Point:</b>	N/D
<b>Solubility in Water:</b>	Complete
<b>Evaporation Rate:</b>	N/D
<b>Vapour Density:</b>	N/D
<b>Molecular Weight:</b>	N/D
<b>Viscosity:</b>	N/A
<b>Flammable Limits:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Density:</b>	8.33 lb/ga
<b>Vapour Pressure:</b>	N/D
<b>% VOC</b>	25.5

## ***Section 10. Stability and Reactivity***

<b>Chemical Stability:</b>	Stable at normal temperatures and pressures.
<b>Incompatibility with Various Substances:</b>	Strong oxidizers, Strong acids
<b>Hazardous Decomposition Products:</b>	Oxides of carbon, Oxides of nitrogen
<b>Possibility of Hazardous Reactions:</b>	None known.

## ***Section 11. Toxicological Information***

Chemical Name	Route of Exposure	LD50 (mg/kg)	LC50 (mg/l)	Species
Diethylhydroxylamine	Oral	LD50	2190 mg/kg	Rat
	Dermal	LD50	1300 mg/kg	Rabbit

**Comments:** None.

## ***Section 12. Ecological Information***

Species	Exposure Duration	LC50 (mg/l)	LC50 (mg/l)
Fathead Minnow	96h	LC50	>1000 mg/l
Ceriodaphnia dubia	48h	LC50	87.6 mg/l

**Comments:** None.

## ***Section 13. Disposal Considerations***

Incinerate or bury in approved landfill. There may be additional local or provincial requirements relating to the disposal of waste. Consult provincial or local regulations regarding the proper disposal of this material. Refer to Transportation of Dangerous Goods (T.D.G.) classifications.

U.S. EPA: Ignitibility characteristic hazardous waste D001 when disposed of in the original product form.



## **Section 14. Transport Information**

### **TDG Classification**

**TDG Name:** COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID  
**Technical Name:** N/A  
**Hazard Class:** Not T.D.G. Regulated  
**UN/NA#:** N/A  
**Packing Group:** N/A

## **Section 15. Regulatory Information**

### **Inventory Status**

**United States (TSCA):** All ingredients listed.  
**Canada (DSL/NDSL):** All ingredients listed.

### **Federal Regulations**

#### **SARA Title III Rules**

##### **Sections 311/312 Hazard Classes**

**Fire Hazard:** Yes  
**Reactive Hazard:** No  
**Release of Pressure:** No  
**Acute Health Hazard:** Yes  
**Chronic Health Hazard:** No

#### **Other Sections**

Section 313 Toxic Chemicals	Section 314 Hazardous	Section 315 Reactive	Section 316 Other
Diethylhydroxylamine	N/A	N/A	N/A

### **State Regulations**

**California Proposition 65:** None known.

#### **Special Regulations**

State	Regulation
Diethylhydroxylamine	None



## International Regulations

### Canada

**WHMIS Classification:** D2B (Toxic Material)  
B3 (Combustible Liquid)

**Controlled Product Regulations (CPR):** 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.

## ***Section 16. Other Information***

---

### HMIS Hazard Rating

**Health:** 1  
**Flammability:** 2  
**Physical Hazard:** 0  
**PPE:** X

**Notes:** The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.  
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

**NSF:** N/A

**FDA:** N/A

**KOSHER:** This product is certified by the Orthodox Union as kosher pareve. Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

**FIFRA:** N/A

**Other:** None





**Abbreviations**

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

**Prepared by: Regulatory Affairs Department**

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## **MATERIAL SAFETY DATA SHEET**

### **Section 1. Chemical Product and Company Identification**

**Product Name:** ChemTreat CT23  
**Product Use:** Boiler Boilout Treatment  
**Supplier's Name:** ChemTreat International, Inc. - Canada  
**Emergency Telephone Number:** (800) 424-9300 (Toll Free)  
(703) 527-3887  
**Address (Corporate Headquarters):** 4461 Cox Road  
Glen Allen, VA 23060  
**Telephone Number for Information:** (800) 648-4579  
**Date of MSDS:** 7 January 2011

### **Section 2. Hazard(s) Identification**



**Signal Word:** **DANGER!**

**Hazard Statement(s):** Causes severe skin burns and eye damage.  
Causes serious eye damage.  
Harmful in contact with skin.  
Harmful if inhaled.  
Harmful if swallowed.

**Precautionary Statement(s):** Wear protective gloves/clothing and eye/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area.

### **Section 3. Composition/Hazardous Ingredients**

<b>Component</b>	<b>CAS Registry #</b>	<b>Wt.%</b>
Potassium hydroxide	1310-58-3	7 - 13
Tetrapotassium pyrophosphate	7320-34-5	1 - 5

## ***Section 4. First Aid Measures***

---

<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>Eyes:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
<b>Skin:</b>	Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a poison center or doctor/physician.
<b>Ingestion:</b>	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.
<b>Notes to Physician:</b>	N/A
<b>Additional First Aid Remarks:</b>	N/A

## ***Section 5. Fire Fighting Measures***

---

<b>Flammability of the Product:</b>	Not flammable.
<b>Suitable Extinguishing Media:</b>	Use extinguishing media suitable to surrounding fire.
<b>Specific Hazards Arising from the Chemical:</b>	None known.
<b>Protective Equipment:</b>	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

## ***Section 6. Accidental Release Measures***

---

<b>Personal Precautions:</b>	Use appropriate Personal Protective Equipment (PPE).
<b>Environmental Precautions:</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
<b>Methods for Cleaning up:</b>	Contain and recover liquid when possible. Flush spill area with water spray.
<b>Other Statements:</b>	None.

## **Section 7. Handling and Storage**

- Handling:** Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapours, mist or dust.
- Storage:** Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.

## **Section 8. Exposure Controls/Personal Protection**

### **Exposure Limits**

<b>Component</b>	<b>Source</b>	<b>Exposure Limits<sup>a</sup></b>
Potassium hydroxide	ACGIH TLV	2 mg/m <sup>3</sup> Ceiling
Tetrapotassium pyrophosphate		N/E

### **Carcinogenicity Category**

<b>Component</b>	<b>Source</b>	<b>Code</b>	<b>Brief Description</b>
Potassium hydroxide			N/E
Tetrapotassium pyrophosphate			N/E

- Engineering Controls:** Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

### **Personal Protection**

- Eyes:** Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.
- Skin:** Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.
- Respiratory:** If misting occurs, use NIOSH approved organic vapour/acid gas dual cartridge respirator with a dust/mist prefilter.



## ***Section 9. Physical and Chemical Properties***

<b>Physical State and Appearance:</b>	Liquid, Light Smoke, Cloudy
<b>Specific Gravity:</b>	1.118 @ 20°C
<b>pH:</b>	14.0 @ 20°C, 100.0%
<b>Freezing Point:</b>	-7.8°C
<b>Flash Point:</b>	N/D
<b>Odour:</b>	Mild
<b>Melting Point:</b>	N/A
<b>Boiling Point:</b>	>100°C
<b>Solubility in Water:</b>	Complete
<b>Evaporation Rate:</b>	As Water
<b>Vapour Density:</b>	As Water
<b>Molecular Weight:</b>	N/D
<b>Viscosity:</b>	N/A
<b>Flammable Limits:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Density:</b>	9.32 lb/ga
<b>Vapour Pressure:</b>	As Water
<b>% VOC</b>	0

## ***Section 10. Stability and Reactivity***

<b>Chemical Stability:</b>	Stable at normal temperatures and pressures.
<b>Incompatibility with Various Substances:</b>	Strong oxidizers, Acids
<b>Hazardous Decomposition Products:</b>	Oxides of carbon
<b>Possibility of Hazardous Reactions:</b>	None known.

## ***Section 11. Toxicological Information***

<b>Chemical Name</b>	<b>Exposure</b>	<b>Type of Effect</b>	<b>Concentration</b>	<b>Species</b>
Potassium hydroxide	Oral	LD50	365 mg/kg	Rat
Tetrapotassium pyrophosphate	Oral	LD50	2980 mg/kg	Rat
	Dermal	LD50	>7940 mg/kg	Rabbit

**Comments:** None.

## ***Section 12. Ecological Information***

<b>Species</b>	<b>Duration</b>	<b>Type of Effect</b>	<b>Test Results</b>
Fathead Minnow	96h	LC50	>1000 mg/l
Ceriodaphnia dubia	48h	LC50	>1000 mg/l

**Comments:** None.

## ***Section 13. Disposal Considerations***

Incinerate or bury in approved landfill. There may be additional local or provincial requirements relating to the disposal of waste. Consult provincial or local regulations regarding the proper disposal of this material. Refer to Transportation of Dangerous Goods (T.D.G.) classifications.

U.S. EPA: Corrosivity characteristic hazardous waste D002 when disposed of in the original product form.

## ***Section 14. Transport Information***

### **TDG Classification**

**TDG Name:** POTASSIUM HYDROXIDE SOLUTION  
**Technical Name:** N/A  
**Hazard Class:** Corrosive  
**UN/NA#:** UN1814  
**Packing Group:** PGII

## ***Section 15. Regulatory Information***

### **Inventory Status**

**United States (TSCA):** All ingredients listed.  
**Canada (DSL/NDSL):** All ingredients listed.

### **Federal Regulations**

#### **SARA Title III Rules**

#### **Sections 311/312 Hazard Classes**

**Fire Hazard:** No  
**Reactive Hazard:** No  
**Release of Pressure:** No  
**Acute Health Hazard:** Yes  
**Chronic Health Hazard:** No



**Other Sections**

Component	Health Hazard	Flammability	Reactivity
Potassium hydroxide	N/A	N/A	1000
Tetrapotassium pyrophosphate	N/A	N/A	N/A

**State Regulations**

**California Proposition 65:** None known.

**Special Regulations**

Component	State
Potassium hydroxide	MA, MN, NY, PA, WA
Tetrapotassium pyrophosphate	None

**International Regulations**

**Canada**

**WHMIS Classification:** D2B (Toxic Material)  
E (Corrosive Material)

**Controlled Product Regulations (CPR):** 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.

**Section 16. Other Information**

**HMIS Hazard Rating**

**Health:** 3  
**Flammability:** 0  
**Physical Hazard:** 1  
**PPE:** X

**Notes:** The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.  
The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

**NSF:** N/A





**FDA:** N/A

**KOSHER:** This product is certified by the Orthodox Union as kosher pareve. Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

**FIFRA:** N/A

**Other:** None

**Abbreviations**

Abbreviation	Definition
<	Less Than
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ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
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OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
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TWA	Time Weight Average
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**Prepared by: Regulatory Affairs Department**

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