



Safety Data Sheet

Section 01 - Identification

Product Identifier	No. 30 Boiler Compound
Other Means of Identification	None
Product Use and Restrictions on Use	Used for treating steam boiler water in food and industrial plants.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Irritation	Category 1

Physical Hazards

Corrosive to Metals	Category 1
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Danger

Hazards Statements

H314 – Causes severe skin burns and eye damage.
H290 – May be corrosive to metals.

Pictograms



Precautionary Statements

P234 – Keep only in original container.
P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
P260 – Do not breathe mist, vapors or spray.
P390 – Absorb spillage to prevent material damage.
P363 – Wash contaminated clothing before reuse.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin
P363 – Wash contaminated clothing before reuse.
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 – Immediately call a POISON CENTER or doctor/physician.
P405 – Store locked up.
P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Sodium Hydroxide (50%)	1310-73-2	3-7%	
Tetrasodium Salt of Ethylene Diamine (EDTA)	64-02-8	3-7%	
DiamineMorpholine	110-91-8	1-5%	

Section 04 - First Aid Measures

Inhalation	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention if difficulties persist.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water for 30 minutes. Seek immediate medical attention. Completely decontaminate clothing, shoes and leather goods before re-use or discard.
Eye Contact	Flush immediately with water for at least 30 minutes. Forcibly holds eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.
Ingestion	Induce vomiting only if directed to do so by poison control center or medical staff. Drink large quantities of water to dilute the chemical. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
Additional Information	Not available

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Use extinguishing media that is appropriate for surrounding fire.
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	Carbon monoxide, carbon dioxide and oxides of sodium.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
Further Information	Not available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment if required. Ventilate area. Stop or reduce leak if safe to do so.
Environmental Precautions	Prevent material from entering sewers or waterways.
Methods and Materials for Containment and Cleaning Up	SMALL SPILLS: Soak up spill with iner absorbent material and scoop into container for future disposal. Flush with water to remove any residue. LARGE SPILLS: Dike and pump into suitable containers. Clean up residual material with inert absorbent material and place into container for future disposal. Flush with water to remove any remaining residual.

Section 07 - Handling and Storage

Precautions for Safe Handling	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Conditions for Safe Storage	Keep container tightly closed. Store in cool, dry area above freezing point away from incompatibles.
Incompatibilities	Oxidizing materials, acids, chlorinated hydrocarbons, aluminum, tin, lead, zinc, copper.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Sodium hydroxide	ACGIH	TLV-C	2mg/m ³
	OSHA	PEL-C	2mg/m ³
Morpholine	ACGIH	TLV-TWA	20ppm (skin)
	OSHA	PEL-TWA	20ppm (skin)

Engineering Control(s)

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn as they may contribute to severe eye injury.
Hand Protection	Impervious gloves of chemically resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Skin and Body Protection	Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse. Impervious boots of chemically resistant material should be worn.
Respiratory Protection	If exposure exceeds occupation exposure limits, use an appropriate NIOSH approved respirator.
Thermal Hazards	Not Available.

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Liquid
Colour	Clear, pale
Odour	Amine odour
Odour Threshold	Not Available

Property

pH	Alkaline
Melting Point/Freezing Point	Not Available
Initial Boiling Point and Boiling Range	Not Available
Flash Point	Not Applicable
Evaporation Rate	Not Available
Flammability	Non-flammable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	Not Available
Solubility(ies)	Completely soluble in water
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Not Applicable
Specific Gravity (Water=1)	1.11
% Volatiles by Volume	Not Available
Formula	Not Available
Molecular Weight	Not Available

Section 10 - Stability and Reactivity

Reactivity	Not Available
Stability	Stable under normal conditions.
Possibility of Hazardous Reactions	Not Available
Conditions to Avoid	Not Available
Incompatible Materials	Oxidizing materials, acids, chlorinated hydrocarbons, aluminum, tin, lead, zinc, copper.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide and oxides of sodium may form.

Section 11 - Toxicological Information

Acute Toxicity Estimate

Component	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
No.30 Boiler Compound	2,693 mg/kg	7,385 mg/kg	23 mg/L

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

Chronic Toxicity – Carcinogenicity

Component	IARC
No. 30 Boiler Compound	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

Skin Corrosion/Irritation	Product is corrosive. Contact may cause irritation and burns.
Ingestion	Ingestion may cause burns to mouth, throat and stomach.
Inhalation	Mist may cause irritation and damage to respiratory system and lungs.
Serious Eye Damage/Irritation	Product is corrosive. May cause irritation and severe burns.
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	No known significant effects.
Reproductive Toxicity	Not Available
STOT-Single Exposure	Not Available
STOT-Repeated Exposure	Repeat or prolonged exposure may cause damage to lungs.
Aspiration Hazard	Not Available
Synergistic Materials	Exposure to morpholine and nitrites at the same time can lead to the production of N-nitrosomorpholine, a potent mutagen and carcinogen in a variety of test systems.

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Sodium hydroxide	Not Available	LC ₅₀ (Oncorhynchus mykiss, 96hr): 45.4mg/L	EC ₅₀ (Ceriodaphnia dubia, 48hr): 40.38mg/L
Tetrasodium EDTA	Not Available	LC ₅₀ (Lepomis macrochirus, 96hr): 1030mg/L	LC ₅₀ (Daphnia magna, 24hr): 625mg/L
Morpholine	EC ₅₀ (Green algae, 96hr): 28mg/L	LC ₅₀ (Gambusia affinis, 96hr): 6.8mg/L	EC ₅₀ (Daphnia magna, 24hr): 100mg/L
Biodegradability	Not Available		
Bioaccumulation	Not Available		
Mobility	Not Available		
Other Adverse Effects	Not Available		

Section 13 – Disposal Considerations

Waste From Residues/Unused Products	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
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Contaminated Packaging

Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	UN1824	
UN Proper Shipping Name	SODIUM HYDROXIDE SOLUTION	
Transport Hazard Class(es)	8	
Packaging Group	II	
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.	
Special Precautions	Not Available	
Transport in Bulk	Not Available	
Additional Information	<u>Packing Group</u>	<u>Limited Quantity Index</u>
	II	1 L
	III	5 L

TDG

Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date September 14, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA
- 7) PAN

ClearTech Industries Inc. - Locations

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