



UNXCHRISTEYNS

A BETTER CLEAN.®

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: BWT – Boiler Water Treatment

Product Number: 1429

Distributed by: UNX-Christeyns, 707 E. Arlington Blvd., Greenville, NC 27858

Customer Service Telephone: 252-756-8616

Website: www.unxchristeyns.com

Email: info@unxchristeyns.com

Emergency phone Number: Velocity EHS (800) 255-3924 (24 HOURS)

Recommended Use: For industrial and commercial boiler water treatment use only.

Restrictions On Use: Do not mix with other chemicals. Do not overuse.

2. HAZARDS IDENTIFICATION

GHS Hazard Classification (in accordance with 29 CFR 1910, OSHA HCS):

Health hazards

Skin corrosion/irritation - Category 1 (H314)

Eye damage/ irritation - Category 1 (H318)

Environmental hazards

Hazardous to the aquatic environment, acute hazard - Category 3 (H402)

Hazardous to the aquatic environment, long-term hazard - Category 3 (H412)

Label elements



Signal Word: **DANGER**

Hazard Statements:

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H402: Harmful to aquatic life.

H412: Harmful to aquatic life with long-lasting effects.

Precautionary statements:

Prevention:

- P233: Keep container tightly closed.
- P234: Keep only in original container.
- P260: Do not breathe mist, vapors or spray.
- P262: Do not get in eyes, on skin, or on clothing.
- P264: Wash thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use in a well-ventilated area.
- P273: Avoid release to the environment.
- P280: Wear protective gloves, protective clothing and eye protection or face protection.

Response:

- P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor or an ophthalmologist.
- P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor.
- P303 + P361 + P353 + P363: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.
- P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P314: Get medical attention if you feel unwell.

Storage:

- P401: Store at temperatures between 60°F and 90°F.
- P403: Store in a well-ventilated place.
- P405: Store locked up.
- P420: Store away from other materials.

Disposal:

- P501: Dispose of contents and container to an approved waste disposal plant in accordance with applicable local, state, federal and international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS #	Concentration
Water	7732-18-5	Proprietary
Sodium hydroxide	1310-73-2	Proprietary
Other ingredients are nonhazardous and/or considered trade secrets. However, all hazardous aspects of the ingredients and of this mixture are considered and included. The exact percentage of composition has been withheld as a trade secret. This SDS is used for a group of substantially similar mixtures.		

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact: Take off immediately all contaminated clothing. Rinse skin with water or shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: No unusual fire or explosion hazards noted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill or leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or

spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Component Information:

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)		
Components	Type	Value
Sodium Hydroxide (CAS 1310-73-2)	PEL	2 mg/m ³

U.S. ACGIH Threshold Limit Values		
Components	Type	Value
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m ³

U.S. NIOSH: Pocket Guide to Chemical Hazards		
Components	Type	Value
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m ³

Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection:

Hand protection: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other: Wear appropriate chemical resistant clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear
Physical state	Liquid
Color	Amber or colorless
Odor	Odorless
Odor threshold	Not available
pH	> 12
Melting point/freezing point	Not determined
Initial boiling point	approximately 212°F (100°C)
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits:	
Flammability limit –	
Lower (%)	Not available
Flammability limit –	
Upper (%)	Not available
Explosive limit - lower (%)	Not available
Explosive limit - upper (%)	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	Not available
Solubility(ies):	
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available

Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information:	
Density	approximately 8 Lb./Gal.
Flash point class	Nonflammable
Specific gravity	approximately 1

10. STABILITY AND REACTIVITY

Reactivity: Reacts violently with strong acids. This product may react with oxidizing agents.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Do not mix with other chemicals. Contact with incompatible materials.

Incompatible materials: Strong acids. Acids. Oxidizing agents. Halogenated materials. Prolonged contact with alkali sensitive metals or alloys.

Hazardous decomposition products: Irritating and/or toxic fumes and gases may be emitted upon the products decomposition. Oxides of Sodium.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects:

Acute toxicity - Not available.

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Eye damage/ irritation: Causes serious eye damage.

Respiratory or skin sensitization:

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure: Not classified.

Specific target organ toxicity - repeated exposure: Not classified.

Aspiration hazard: Not an aspiration hazard.

Chronic effects: Prolonged inhalation may be harmful.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life with long-lasting effects.

Component Information:

Product		Species	Test Results
Sodium Hydroxide 50%			
Aquatic			
Crustacea	EC50	Daphnia	69.18 mg/l, 48 hours estimated
Fish	LC50	Fish	250 mg/l, 96 hours estimated
Components		Species	Test Results
Sodium Hydroxide (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATIONS

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers or water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT: UN1760, Corrosive liquids, n.o.s. (contains Sodium hydroxide solution), 8, PGII.

Reportable Quantity = 1000 Lb.

15. REGULATORY INFORMATION

U.S. federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) - Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4) - Sodium Hydroxide (CAS 1310-73-2) - Listed.

SARA 304 Emergency release notification - Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) - Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance:	Not listed.
SARA 311/312 Hazardous chemical	Yes
SARA 313 (TRI reporting)	Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List - Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) - Not regulated.

Safe Drinking Water Act (SDWA) - Not regulated.

U.S. state regulations

U.S. - California Candidate Chemicals: Listed Sodium Hydroxide (CAS 1310-73-2)

U.S. California Controlled Substances - CA Department of Justice (California Health and Safety Code Section 11100) -Not listed.

U.S. Massachusetts RTK - Substance List: Sodium Hydroxide (CAS 1310-73-2)

U.S. New Jersey Worker and Community Right-to-Know Act: Sodium Hydroxide (CAS 1310-73-2)

U.S. Pennsylvania Worker and Community Right-to-Know Law: Sodium Hydroxide (CAS 1310-73-2)

U.S. Rhode Island RTK: Sodium Hydroxide (CAS 1310-73-2)

U.S. California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. OTHER INFORMATION

HMIS & NFPA Ratings: Health = 3 Fire = 0 Reactivity = 1

HMIS & NFPA ratings involve data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists

CAS = Chemical Abstract Service

GHS = Globally Harmonized System

HCS = Hazard Communication Standard

N.A. = Not Available or Not Applicable

NIOSH = National Institute for Occupational Safety & Health

PEL = Permissible Exposure Limit

RTECS = Registry of Toxic Effects of Chemical Substances

STEL = Short Term Exposure Limit

TLV = Threshold Limit Values

TWA = Time Weighted Average limit or ceilings (C) (exposure limit)

DISCLAIMER: The information contained herein is based upon data obtained from sources believed to be reliable and reflects our best professional judgment. Since it is impossible to anticipate all of the conditions under which our products may be used, we do not guarantee that the recommendations will be adequate for all individuals and situations. Each user of this product should determine the suitability of the product for his or her particular purpose and should comply with all federal, state and local regulations. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. We shall not be held liable for any damage resulting from handling or from contact with the above product or from improper use of our products. We do not provide any warranties, expressed or implied, and do not assume any responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. We update SDS and labels on a regular basis. Please do not hesitate to contact us for current information.

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