SAFETY DATA SHEET

BOILER MP 4363

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: BOILER MP 4363
Common Name: MIXTURE
SDS Number: 3185
Product Code: BT0227
Revision Date: 7/12/2019
Version: 1
Product Use: BOILER WATER TREATMENT

Supplier Details: U. S. Water, a Kurita company
12270 43rd St. NE
St. Michael, MN 55376

Contact: Non-emergency #: 866-663-7632
Email: SDS@uswaterservices.com
Web: www.uswaterservices.com

EMERGENCY RESPONSE: (ChemTel)
US & Canada: 800-255-3924
International: +01-813-248-0585

2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):
Health, Skin corrosion/irritation, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

GHS Hazard Statements:

H314 - Causes severe skin burns and eye damage

GHS Precautionary Statements:

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash skin thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER/doctor.
P321 - Specific treatment (see first aid instructions on this label).
P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.
P501 - Dispose of contents/container to licensed waste handling facility

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

3 COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Ingredients:

CAS#	%	Chemical Name:
1310-58-3	5-15%	Potassium hydroxide

4 FIRST AID MEASURES

Inhalation: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact: IF ON SKIN: Immediately rinse with plenty of water (for at least 15 minutes). Get medical advice/attention.

Eye Contact: IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Get medical advice/attention.
Ingestion: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms & effects (acute & delayed)**:** Causes severe skin burns and eye damage. May cause headache, nausea, and irritation of respiratory tract. Highly corrosive to skin. Causes serious eye burns. Severe irritation or burns to the mouth, throat, esophagus, and stomach. Possible esophageal perforation.
Indication of need for immediate medical attention: No additional information available.
Special treatment needs: None
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

5 FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable: Water spray. Carbon dioxide. Alcohol-resistant foam. Dry powder.

Unsuitable: No information available

Hazardous combustion products: No dangerous reactions known under normal condition of use.

Unusual Fire or Explosion Hazards: Product is not flammable. Product is not explosive.

Special protective equipment/precautions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Do not enter fire area without proper protective equipment, including respiratory protection.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective equipment, emergency procedures: Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equiped with respiratory equipment and full chemical protective gear (see section 8). Wear protective equipment as described in Section 8. Evacuate unnecessary personnel. Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air, in case of emergency.
Environmental Precautions: Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.
Spill/Leak procedures: For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).
Regulatory Requirements: Dispose of recovered material in accordance with all applicable state and federal regulations

7 HANDLING AND STORAGE

Handling Precautions: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists. Keep away from sources of ignition - No smoking.

Storage Requirements: Storage conditions: Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.
Incompatible products: Strong oxidizers. Strong acids.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment: Gloves. Protective goggles. Face shield. Protective clothing. Respiratory protection of the dependent type.
Hand protection: Protective gloves made of rubber.
Eye protection: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin and body protection: Corrosionproof clothing.
Respiratory protection: An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

Exposure Limits:	**Potassium hydroxide (1310-58-3)**
ACGIH Ceiling (mg/m³):	2 mg/m³
OSHA PEL (Ceiling) (mg/m³):	2 mg/m³ vacated

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Fluorescent green		
Physical State:	Liquid	**Odor:**	Sweet
Odor Threshold:	No data available	**Solubility:**	Complete solubility in water
Spec Grav./Density:	1.10 - 1.18	**Freezing/Melting Pt.:**	No data available
Viscosity:	No data available	**Flash Point:**	No data available
Boiling Point:	100 °C	**Vapor Density:**	No data available
Flammability:	No data available	**Auto-Ignition Temp:**	No data available
Vapor Pressure:	No data available	**UFL/LFL:**	No data available
pH:	~12.8 (10% v/v)		
Evap. Rate:	No data available		
Decomp Temp:	No data available		

10 STABILITY AND REACTIVITY

Reactivity: No dangerous reactions known under normal conditions of use.
Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
Conditions to Avoid: Sparks. Heat. Open flame.
Materials to Avoid: Oxidizing agent. Strong acids. Soft metals (aluminum, copper, brass).
Hazardous Decomposition: Thermal decomposition generates : Carbon oxides (CO, CO2). Sulfur oxides.
Hazardous Polymerization: None known.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available
Skin Corrosion/Irritation: Causes severe skin burns and eye damage. pH: 12.5 - 13.5 (10% v/v)
Serious eye damage/irritation: Not classified. pH: 12.5 - 13.5 (10% v/v)
Respiratory or skin sensitization: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
Carcinogenicity: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Symptoms/injuries after inhalation: May cause headache, nausea and irritation of respiratory tract.
Symptoms/injuries after skin contact: Highly corrosive to skin.
Symptoms/injuries after eye contact: Causes serious eye burns.
Symptoms/injuries after ingestion: Severe irritation or burns to the mouth, throat, esophagus, and stomach. Possible esophageal perforation.

12 ECOLOGICAL INFORMATION

Aquatic Toxicity : No data available
Elimination (persistency & degradability): No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects: No data available

13 DISPOSAL CONSIDERATIONS

Waste tratment methods: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

14 TRANSPORT INFORMATION

UN1760, Corrosive liquids, n.o.s., (Potassium Hydroxide), 8, PG II

15 REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[5-15%] RQ(1000LBS), Potassium hydroxide (1310-58-3) CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TXAIR

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

RQ = Reportable Quantity
CERCLA = Superfund clean up substance
CSWHS = Clean Water Act Hazardous substances
MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

EPA / CERCLA / SARA TITLE III:
Toxic Chemical List (SARA 313): This product does not contain any chemicals subject to routine annual toxic chemical release reporting.
Extremely Hazardous Substance (SARA 302/304): This product does not contain any extremely hazardous substances subject to emergency planning requirements.
SARA 312: Acute
RCRA: Corrosive, D002

16 OTHER INFORMATION

Author: U.S. Water, a Kurita company

Revision Notes: Updated to GHS format

Disclaimer:
Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s). The above information is not claiming characteristics of the product in term of legal claims of performance / guarantee. This information only describes safety measures and no liability may arise from the use or application of the product described herein. This information is given in good faith and based on our current knowledge of the product.

Revision Date: 7/12/2019