



Safety Data Sheet

1 – PRODUCT IDENTIFICATION

PRODUCT NAME:.....**3097**

PRODUCT NUMBER:3097

DESCRIPTION:Boiler Water Treatment

OTHER MEANS OF IDENTIFICATION:Clear, slightly yellow to a brownish alkaline liquid with a faint characteristic odor.

RECOMMENDED USE:Boiler water treatment.

RESTRICTIONS ON USE:Use only as directed.

COMPANY:..... CHEMTRON CORPORATION

3500 Harry S. Truman Blvd

St. Charles, MO 63301

636-940-5445 (Mon-Fri., 8:00-4:00)

www.chemtroncorporation.com

EMERGENCY PHONE:(800) 424-9300 (CHEMTREC)

REVISION DATE:.....APRIL 15, 2016

2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:.....Corrosive. Clear, slightly yellow to a brownish alkaline liquid with a faint characteristic odor. Product is corrosive to eyes, skin, internal respiratory and GI tissues, and some metals. May react exothermically (get hot) with acid.

CLASSIFICATION 29 CFR 1910.1200:Product is hazardous by OSHA criteria.

Corrosive to skincategory 1, subcategory 1B

Serious eye damagecategory 1

STOT-SE, respiratory system.....category 1

STOT-SE, gastrointestinal system...category 1

Corrosive to metals.....category 1

.....

.....* STOT-SE refers to specific target organ toxicity-single exposure



GHS SIGNAL WORD:**Danger**



Safety Data Sheet

GHS HAZARD STATEMENTS:.....H314: Causes severe skin burns and eye damage.

H332: Harmful if inhaled; Causes damage to respiratory system

H302: Harmful if swallowed: Causes damage to digestive system

H290: May be corrosive to metals

GHS PRECAUTIONARY STATEMENTS:.....P262: Do not get in eyes, on skin, or on clothing.

P281: Use personal protective equipment as required, Wear eye protection and protective industrial rubber gloves. When conditions warrant use, add face shield, apron, and/or rubber boots

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P264: Wash ... thoroughly after handling, wash gloves and contaminated surfaces.

Absorb spillage to prevent material damage.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing for 15 min. call a doctor.

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately, call a doctor.

P363: Wash contaminated clothing before reuse.

P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Keep only in original container.

P405: Store locked up

P501: Dispose of contents/container in accordance with local state and federal regulations.

HAZARDS NOT OTHERWISE CLASSIFIED:Contact with some metals may generate explosive hydrogen gas.

INGREDIENTS WITH UNKNOWN TOXICITY:.....None Known

POTENTIAL ENVIRONMENTAL EFFECTS:Significant contamination of small bodies of surface water or localized areas at the point of a spill may elevate pH levels above tolerable levels for aquatic organisms. Product contains phosphate. Phosphate may fertilize undesirable algal growth in aquatic ecosystems.

3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Potassium Hydroxide	1.0-5.0	1310-58-3
Sodium Hydroxide	1.0-5.0	1310-73-2

* The exact percent by weight of the ingredient(s) in this formulation is proprietary.



Safety Data Sheet

4 – FIRST-AID MEASURES

BREATHING (INHALATION):..If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a doctor.

SWALLOWING (INGESTION):..If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately, call a poison control center or doctor.

EYES:.....If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes. Immediately, call a doctor.

SKIN (DERMAL):If on skin (or hair): Immediately, take off all contaminated clothing. Rinse skin with water. Use safety shower if available. Immediately, call a doctor.

ACUTE SYMPTOMS:.....Irritation or burns to eyes, skin, or mucous membranes. Injury may result in permanent damage to eyesight or permanent scars on skin.

DELAYED EFFECTS:None known.

IMMEDIATE OR SPECIAL TREATMENT:After contact with product, immediately flush eyes and/or skin with water for 15 minutes. If safety shower or eye wash is plumbed to cold water, it may be necessary to move victim to a locker room shower or elsewhere to obtain a lukewarm water source before the 15 minute flush is complete. After the 15 minute flush, seek medical treatment.

5 – FIRE-FIGHTING MEASURES

FLASHPOINT:.....None, not flammable

EXTINGUISHING MEDIA:.....Product is not flammable. Use media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES:Wear self-contained breathing apparatus and full turn-out gear. Approach fire from upwind direction. If possible, move containers away from fire. Cool fire exposed containers with water spray. If containers rupture or leak, product may evolve irritating or toxic gas under extreme heat.

6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:.....Contain and collect spills with commercial absorbents. Consult local authorities for appropriate waste classification and waste disposal options in your location.

PERSONAL PRECAUTIONS:....Wear chemical splash goggles and protective industrial rubber gloves. When conditions warrant use, add face shield, apron, and/or rubber boots. If spill escapes to sanitary sewer, notify local public works authorities. If spill escapes to the environment, notify state and federal EPA and, if appropriate, the Coast Guard. Potassium hydroxide ingredient has a CERCLA RQ (reportable quantity) of 1,000 pounds. Product contains 1-5% potassium hydroxide. Sodium hydroxide ingredient has a CERCLA RQ (reportable quantity) of 1,000 pounds. Product contains 1-5% sodium hydroxide.



Safety Data Sheet

7 – HANDLING and STORAGE

STORAGE:Store product in closed container in well ventilated, secure area. Protect containers against physical damage. Protect label. Avoid contact between this product and other chemicals, especially acids and oxidizers. Empty containers retain product residues and all label hazards are still present until container is thoroughly cleaned.

HANDLING:.....Open container slowly until pressure is relieved. Avoid spillage. Clean up small spills and drips promptly. Protect product from contamination. Avoid contact between this product and other chemicals. The recommended disposal for rinse waters from empty units is discharge to the treated system.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:Exposure limits for the formulated product are not established. Exposure limits for ingredient(s):

INGREDIENT	SOURCE & PARAMETER	EXPOSURE LIMIT
Potassium Hydroxide	ACGIH Ceiling	2 mg/m3
Sodium Hydroxide	OSHA PEL	none
	NIOSH REL ceiling	2 mg/m3
	ACGIH CEILING	2 mg/m3
	OSHA PEL	2 mg/m3

PROTECTIVE CLOTHING:Wear chemical splash goggles and protective industrial rubber gloves. When conditions warrant use, add face shield, apron, and/or rubber boots.

ADDITIONAL MEASURES:.....General exhaust ventilation is adequate. Employ work practices and product transfer practices that avoid spills, drips, or contact with any incompatible material.

9 – PHYSICAL / CHEMICAL PROPERTIES

APPEARANCE:Clear, light yellow to a brownish alkaline liquid

ODOR:Faint characteristic odor

BOILING POINT: >212° F

VAPOR PRESSURE:.....Not known, similar to water

VAPOR DENSITY (AIR=1):Not known, similar to water

SPECIFIC GRAVITY:1.16-1.27

pH:12.5-14

SOLUBILITY IN WATER:Completely miscible in water

FLAMMABILITY:Not Flamable

EVAPORATION RATE:.....Similar to water.

MELTING POINT/FREEZING POINT:< 32 F



Safety Data Sheet

10 – STABILITY and REACTIVITY

- REACTIVITY:**Product will react exothermically (get hot), boil, and spatter if contact with acid occurs. Product may also generate heat after contact with water (other than recommended use). Product may also react with halogenated compounds.
- STABILITY:**Stable at ambient temperatures and pressures.
- HAZARDOUS POLYMERIZATION:**Product will react exothermically (get hot), boil, and spatter if contact with acid occurs. Contact with aluminum, brass, bronze, copper, lead, tin, zinc, or other alkali sensitive metals may generate flammable hydrogen gas. Polymerization will not occur.
- INCOMPATIBILITY:**Acids and halogenated compounds. May be corrosive to metals.
- HAZARDOUS REACTIONS:**Avoid contact with acid. Avoid contact with metals. Contact with carbohydrate foods or beverages may generate toxic carbon monoxide gas.
- HAZARDOUS DECOMP:**Corrosive aerosols, metal oxide fumes, oxides of carbon, oxides of sulfur and oxides of phosphorus.

11 – TOXICOLOGICAL INFORMATION

- LIKELY ROUTES OF EXPOSURE:**Eye or skin contact.
- TOXICOLOGICAL CHARACTERISTICS:**Product is corrosive to eyes, skin, mucous membranes, and other tissues. Contact will irritate or burn eyes and skin. Permanent damage to eyesight is possible. Permanent scars are possible. Damage to critical respiratory or gastrointestinal systems is possible following overexposure. Inhalation of product in mist or aerosol form may do serious damage to respiratory system by burning tissues. Similar damage to the gastrointestinal system is possible following ingestion. Consequently, product is classified as a specific target organ toxicity - single exposure (STOT-SE) hazard for inhalation (respiratory system) or ingestion (digestive system).
- DELAYED EFFECTS:**None known.
- IMMEDIATE EFFECTS:**Irritation or burns to eyes, skin, or other tissues including upper respiratory tract. Gastrointestinal irritation or burns and nausea if ingested.
- CHRONIC EFFECTS:**Not Known.
- NUMERICAL MEASURES OF TOXICITY:**No toxicology available on the formulated product. Toxicology data for product ingredients:
- LISTED CARCINOGEN:**None of the product ingredients are listed as carcinogens by IARC, NTP, or OSHA.

INGREDIENTS	DATA
Potassium hydroxide	Oral rat LD50 214 mg/kg



Safety Data Sheet

12 – ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION: Significant contamination of small bodies of surface water or localized areas at the point of a spill may elevate pH levels above tolerable levels for aquatic organisms. No aquatic toxicity data available for the formulated product. Aquatic toxicity for ingredients:

PRODUCT	DATA
Potassium hydroxide	Mosquito fish 80 mg/L LC50 96 hour
Sodium hydroxide	Daphnia magna 60 mg/L LC50 48 hour
	Mosquito fish 96 mg/L LC50 125 hours
	Ceriodaphnia dubia 48 hour EC50 40.4 mg/L

PERSISTENCE AND DEGRADABILITY:Potassium hydroxide and sodium hydroxide degrade via neutralization reactions.

BIOACCUMULATIVE POTENTIAL:Product ingredients do not bioaccumulate.

MOBILITY IN SOIL:Not known.

OTHER ADVERSE EFFECTS: ..None known.

13 –DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:Product is consumed during recommended use. Flush container residues to the treated system. If product is not consumed in use, material is RCRA hazardous waste, D002, corrosive liquid. Dispose of contents or container in accordance with local, state, and federal regulations.

14 – TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:.....Corrosive Liquid, Basic, Inorganic, N.O.S. (Potassium Hydroxide, Sodium Hydroxide)

HAZARD CLASS:8,

UN/NA NUMBER:UN3266

PACKAGING GROUP :II



ENVIRONMENTAL HAZARDS:Does not contain ingredient(s) listed as marine pollutant.

TRANSPORT IN BULK:Product container meets or exceeds DOT requirements. Product is shipped to end user. Material is a Packing Group II corrosive liquid. No extraordinary measures are required for shipment in bulk tanks including totes. See 49 CFR 172.101 & 49 CFR172.102.



Safety Data Sheet

15 - REGULATIONS

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR 1910.1200

EPA SRA Title III Chemical Listings:

TSCA (Toxic Substance Control Act) STATUS:All ingredients listed or exempt

SECTION 312:.....Immediate hazard, corrosive to skin and eyes

SARA SECTION 313:.....Not listed

US EPA CERCLA:Potassium hydroxide ingredient has a CERCLA RQ (reportable quantity) of 1,000 pounds. Product contains 1-5% potassium hydroxide. sodium hydroxide ingredient has a CERCLA RQ (reportable quantity) of 1,000 pounds. Product contains 1-5% sodium hydroxide

16 – OTHER INFORMATION

NFPA HAZARD RANKING

HEALTH	FIRE	REACTIVITY	SPECIAL
3	0	1	none

HMIS HAZARD RANKING

HEALTH	FIRE	REACTIVITY	PPE
3	0	1	n & p or X (defined below)

n - splash goggles

p - gloves

X - consult supervisor

This data is offered in good faith and believed to be accurate, but it is for the users to satisfy themselves of the product suitability for their own purpose. There is no warranty expressed or implied. The recommended hygiene and safe handling procedures are believed to be generally applicable. The information given is designed only as a guidance. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.