



Safety Data Sheet

1 – PRODUCT IDENTIFICATION

PRODUCT NAME:.....**3088**
PRODUCT NUMBER:3088
DESCRIPTION:.....Boiler Water Treatment
OTHER MEANS OF IDENTIFICATION:.....Clear colorless to light amber alkaline liquid with a faint characteristic odor.
RECOMMENDED USE:.....Boilerwater treatment. Do not use in the treatment of drinking water. Avoid contact with acid.
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:.....November 15, 2019

2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:.....Corrosive. Clear, colorless to light amber 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 damage.....category 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**



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GHS HAZARD STATEMENTS:.....H314: Causes severe skin burns and eye damage.
H332: Harmful if inhaled; Causes damage to respiratory system
H370: Causes damage to organs: causes damage to gastrointestinal system by ingestion.
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.
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
Absorb spillage to prevent material damage.
P501: Dispose of contents/container in accordance with local state and federal regulations.

HAZARDS NOT OTHERWISE CLASSIFIED:.....Product may react with some metals to generate flammable 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 a small amount of phosphorus. If product enters surface water, phosphorus may eventually become available to algae. Degradation and nutrient release is expected to proceed slowly.

3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Sodium Hydroxide (caustic soda)	1-10	1310-73-2

The exact percent by weight of the ingredients in this formulation is proprietary.



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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:**Following inhalation overexposure, symptoms of pulmonary edema may be delayed up to 48 hours.
- 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:**.....Not Flammable.
- EXTINGUISHING MEDIA:**.....Product is not flammable. Use media appropriate for surrounding fire.
- SPECIAL FIRE FIGHTING PROCEDURES:**Product is corrosive to eyes, skin, and respiratory system. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat. Product generates heat upon contact with water - with possible spattering (boiling) of corrosive liquid. Contact with some metals may generate explosive hydrogen gas. Thermal decomposition under fire conditions may produce corrosive aerosols, metal oxide fumes, oxides of carbon, and oxides of phosphorus.

6 – ACCIDENTAL RELEASE MEASURES

- SPILL PROCEDURES:**.....Contain and collect spills with commercial absorbents. Unused product or spill cleanup residues may be RCRA hazardous waste by the characteristic of corrosivity (D002). 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. The CERCLA RQ for sodium hydroxide is 1,000 pounds. Product contains 1-5% sodium hydroxide.



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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 some ingredient(s):

INGREDIENT	SOURCE & PARAMETER	EXPOSURE LIMIT
Sodium hydroxide	ACGIH Ceiling	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.

NOTE:OSHA - Occupational Safety and Health Administration; ACGIH - American Conference of Governmental Industrial Hygienists; NIOSH - National Institute for Occupational Safety and Health; PEL - Permissible Exposure Limit; TWA - Time Weighted Average; TLV - Threshold Limit Value; REL - Recommended Exposure Limit; STEL - Short Term Exposure Limit; IDLH - Immediately Dangerous to Life or Health.

9 – PHYSICAL / CHEMICAL PROPERTIES

APPEARANCE:Clear, colorless to light amber 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:1-1.1

pH:13.6-13.7

SOLUBILITY IN WATER:Completely miscible in water

FLAMMABILITY:Not flammable

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



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10 – STABILITY and REACTIVITY

REACTIVITY:.....Product will react violently with acid or exothermically (get hot) after contact with water (other than recommended use). Product will also react with other incompatible materials, notably oxidizers.

STABILITY:.....Stable at ambient temperatures and pressures.

HAZARDOUS POLYMERIZATION:.....May react violently with acid. Corrosive liquid may boil and splatter. Contact with water may generate heat. Contact with metal may generate flammable hydrogen gas. Polymerization will not occur.

INCOMPATIBILITY:.....Acids and oxidizers. May be corrosive to metals, i.e., aluminum, tin, zinc, copper, and many alloys.

HAZARDOUS REACTIONS:Contact with acid or oxidizers.

HAZARDOUS DECOMP:Corrosive aerosols, metal oxide fumes, oxides of carbon, and oxides of phosphorus.

11 – TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE:Skin or eye 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:Following inhalation overexposure, symptoms of pulmonary edema may be delayed up to 48 hours.

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 ingredient(s):

LISTED CARCINOGEN:None of the product ingredients are listed as carcinogens by IARC, NTP, or OSHA.

INGREDIENTS	DATA
Sodium hydroxide	Oral rat LD50 300-500 mg/kg



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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 ingredient(s):

COMPONENT	DATA
Sodium hydroxide	Mosquito fish 96 hour LC50 125 mg/l
Sodium Hydroxide	Ceriodaphnia dubia 48 hour LC50 40.4 mg/l

PRODUCT	DATA
3088	Ceriodaphnia Dubia 48hr LC50 3279.63 mg/L

PERSISTENCE AND DEGRADABILITY:The hazardous ingredient listed I Section 3 is an inorganic compound that does not biodegrade, but it is subject to neutralization reactions which will reduce hazardous properties. Product contains a small amount of phosphorus. If product enters surface water, phosphorus may eventually become available to algae. Degradation and nutrient release is expected to proceed slowly.

BIOACCUMULATIVE POTENTIAL:Product ingredients do not bioaccumulate.

MOBILITY IN SOIL:.....Not known.

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.

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. (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



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required for shipment in bulk tanks including totes. See 49 CFR 172.101 & 49 CFR172.102.

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 from listing

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

SARA SECTION 313:.....Not Listed.

US EPA CERCLA:The CERCLA RQ for sodium hydroxide is 1,000 pounds. Product contains 1-5% sodium hydroxide.

16 – OTHER INFORMATION

NFPA HAZARD RANKING

HEALTH	FIRE	REACTIVITY	SPECIAL
3	0	1	

HMS 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.