

**Section: 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : NALCO® 8338

Other means of identification : Not applicable.

Recommended use : CLOSED SYSTEM CORROSION INHIBITOR

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company  
1601 W. Diehl Road  
Naperville, Illinois 60563-1198  
USA  
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 11/14/2017

**Section: 2. HAZARDS IDENTIFICATION**

**GHS Classification**

Oxidizing liquids : Category 3  
 Acute toxicity (Oral) : Category 4  
 Skin corrosion : Category 1  
 Serious eye damage : Category 1  
 Specific target organ toxicity - single exposure (Oral) : Category 1 (Blood)

**GHS Label element**

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : May intensify fire; oxidiser.  
 Harmful if swallowed.  
 Causes severe skin burns and eye damage.  
 Causes damage to organs (Blood) if swallowed.

Precautionary Statements : **Prevention:**  
 Keep away from heat. Keep/Store away from clothing and other combustible materials. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing.

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Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
IF exposed: Call a POISON CENTER or doctor/ physician.

**Other hazards** : None known.

## Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Sodium Nitrite	7632-00-0	10 - 30
Inorganic salt	Proprietary	1 - 5
Substituted Triazole	Proprietary	1 - 5
Sodium Tetraborate	1330-43-4	0.1 - 1
Sodium Hydroxide	1310-73-2	0.1 - 1

## Section: 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

## Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Oxidizer. Contact with other material may cause fire.

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- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) metal oxides
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

## Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

## Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep in a cool, well-ventilated place. Do not store near acids. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Shipping and long term storage compatibility with construction materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : not determined

## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Sodium Tetraborate	1330-43-4	TWA	1 mg/m <sup>3</sup>	NIOSH REL
		TWA (Inhalable fraction)	2 mg/m <sup>3</sup> (Borate)	ACGIH

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		STEL (Inhalable fraction)	6 mg/m3 (Borate)	ACGIH
Sodium Hydroxide	1310-73-2	Ceiling	2 mg/m3	ACGIH
		Ceiling	2 mg/m3	NIOSH REL
		TWA	2 mg/m3	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

## Personal protective equipment

Eye protection : Safety goggles  
Face-shield

Hand protection : Wear protective gloves.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

## Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid  
Colour : yellow  
Odour : Organic  
Flash point : > 93.3 °C  
pH : 11.5 - 14.0,(100 %), (25 °C)  
Odour Threshold : no data available  
Melting point/freezing point : FREEZING POINT: -16.6 °C  
Initial boiling point and boiling range : no data available  
Evaporation rate : no data available  
Flammability (solid, gas) : no data available  
Upper explosion limit : no data available  
Lower explosion limit : no data available  
Vapour pressure : no data available  
Relative vapour density : no data available  
Relative density : 1.16 - 1.20, (25.0 °C),

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Density : 9.8 lb/gal  
Water solubility : completely soluble  
Solubility in other solvents : no data available  
Partition coefficient: n-octanol/water : no data available  
Auto-ignition temperature : no data available  
Thermal decomposition : no data available  
Viscosity, dynamic : 3 mPa.s (21 °C)  
Viscosity, kinematic : no data available  
Molecular weight : no data available  
VOC : no data available

### Section: 10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.  
Conditions to avoid : None known.  
Incompatible materials : Amines  
Strong acids  
Reducing agents  
Hazardous decomposition products : Decomposition products may include the following materials:  
Carbon oxides  
nitrogen oxides (NOx)  
metal oxides

### Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

Eyes : Causes serious eye damage.  
Skin : Causes severe skin burns.  
Ingestion : Harmful if swallowed. Causes digestive tract burns.  
Inhalation : May cause nose, throat, and lung irritation.  
Chronic Exposure : May cause damage to organs.

#### Experience with human exposure

Eye contact : Redness, Pain, Corrosion

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Skin contact : Redness, Pain, Corrosion  
Ingestion : Corrosion, Abdominal pain  
Inhalation : Respiratory irritation, Cough

### Toxicity

#### Product

Acute oral toxicity : Acute toxicity estimate: 904.52 mg/kg  
Acute inhalation toxicity : no data available  
Acute dermal toxicity : no data available  
Skin corrosion/irritation : no data available  
Serious eye damage/eye irritation : no data available  
Respiratory or skin sensitization : no data available  
Carcinogenicity : no data available  
Reproductive effects : no data available  
Germ cell mutagenicity : no data available  
Teratogenicity : no data available  
STOT - single exposure : no data available  
STOT - repeated exposure : no data available  
Aspiration toxicity : no data available

#### **Components**

Acute dermal toxicity : Inorganic salt  
LD50 rat: > 5,000 mg/kg

## Section: 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Environmental Effects : Harmful to aquatic life.

#### **Product**

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout): 38 mg/l  
Exposure time: 96 hrs  
Test substance: Product  
  
LC50 *Pimephales promelas* (fathead minnow): 303 mg/l  
Exposure time: 96 hrs  
Test substance: Product  
  
NOEC *Oncorhynchus mykiss* (rainbow trout): 13 mg/l  
Exposure time: 96 hrs  
Test substance: Product

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NOEC Pimephales promelas (fathead minnow): 125 mg/l  
Exposure time: 96 hrs  
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Daphnia magna (Water flea): 250 mg/l  
Exposure time: 48 hrs  
Test substance: Product

LC50 Ceriodaphnia dubia: 138 mg/l  
Exposure time: 48 hrs  
Test substance: Product

EC50 Daphnia magna (Water flea): 120 mg/l  
Exposure time: 48 hrs  
Test substance: Product

NOEC Daphnia magna (Water flea): 79 mg/l  
Exposure time: 48 hrs  
Test substance: Product

NOEC Ceriodaphnia dubia: 100 mg/l  
Exposure time: 48 hrs  
Test substance: Product

## Components

Toxicity to algae : Substituted Triazole  
LC50 : 26.2 mg/l  
Exposure time: 72 h

## Persistence and degradability

Greater than 95% of this product consists of inorganic substances for which a biodegradation value is not applicable.

Chemical Oxygen Demand (COD): 77,600 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	< 2 mg/l	Product

## Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air : <5%  
Water : 30 - 50%  
Soil : 50 - 70%

The portion in water is expected to be soluble or dispersible.

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## Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

## Other information

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: : D002

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

### Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, N.O.S.  
Technical name(s) : SODIUM HYDROXIDE, SODIUM TOLYLTRIAZOLE  
UN/ID No. : UN 1760  
Transport hazard class(es) : 8  
Packing group : III  
Reportable Quantity (per package) : 508 lbs  
RQ Component : Sodium Nitrite

### Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, N.O.S.  
Technical name(s) : SODIUM HYDROXIDE, SODIUM TOLYLTRIAZOLE  
UN/ID No. : UN 1760  
Transport hazard class(es) : 8  
Packing group : III  
Reportable Quantity (per package) : 508 lbs



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RQ Component : Sodium Nitrite

## Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, N.O.S.  
Technical name(s) : SODIUM HYDROXIDE, SODIUM TOLYLTRIAZOLE  
UN/ID No. : UN 1760  
Transport hazard class(es) : 8  
Packing group : III

## Section: 15. REGULATORY INFORMATION

### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium Nitrite	7632-00-0	100	508

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard  
Fire Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Sodium Nitrite	7632-00-0	10 - 30 %
Sodium Nitrate	7631-99-4	1 - 5 %

#### US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpart D):

The following components are listed: Sodium Nitrite

#### California Prop 65

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

#### INTERNATIONAL CHEMICAL CONTROL LAWS :

##### United States TSCA Inventory

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

##### Australia. Industrial Chemical (Notification and Assessment) Act

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

##### Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

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## Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

## Korea. Korean Existing Chemicals Inventory (KECI)

This product contains substance(s) which are not in compliance with the Chemical Control Act (CCA) and may require additional review.

## Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

## China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

## New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

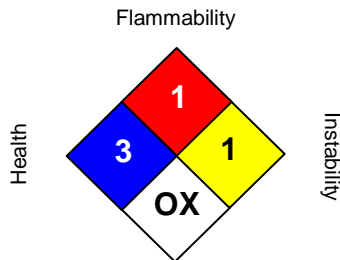
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

## Taiwan Chemical Substance Inventory

All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

## Section: 16. OTHER INFORMATION

### NFPA:



Special hazard.

### HMIS III:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>1</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 11/14/2017  
Version Number : 1.3  
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.

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