

**PRODUCT** 

# **NALCO® TRAC109**

**EMERGENCY TELEPHONE NUMBER(S)** (800) 424-9300 (24 Hours) CHEMTREC

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

**NALCO® TRAC109** 

**COMPANY IDENTIFICATION:** 

Nalco Company 1601 W. Diehl Road Naperville, Illinois 60563-1198

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NFPA 704M/HMIS RATING

HEALTH: 3/3\*

FLAMMABILITY:

0/0 **INSTABILITY:**  0/0

OTHER:

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme \* = Chronic Health Hazard

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)

CAS NO

% (w/w)

Sodium Hydroxide Sodium Nitrite

1310-73-2

1.0 - 5.0

7632-00-0

20.0 - 40.0

#### 3. HAZARDS IDENTIFICATION

### \*\*EMERGENCY OVERVIEW\*\*

#### **DANGER**

Corrosive. May cause tissue damage. Contains sodium nitrite. May be harmful or fatal if swallowed. Substances in the product can lead to the formation of methemoglobin. Unborn children are particularly sensitive to methemoglobinemia.

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with

Wear a face shield. Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. Not flammable or combustible. If product is allowed to dry, the sodium nitrite is an oxidizing agent and can initiate the combustion of other materials. May evolve oxides of nitrogen (NOx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE:

Eye, Skin



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### **HUMAN HEALTH HAZARDS - ACUTE:**

### EYE CONTACT:

Corrosive. Will cause eye burns and permanent tissue damage.

### SKIN CONTACT:

Corrosive; causes permanent skin damage.

#### INGESTION:

Not a likely route of exposure. Corrosive; causes chemical burns to the mouth, throat and stomach. Large exposures may be fatal. Ingestion of sodium nitrite can cause methemoglobinemia which can lead to cyanosis and possible death. Pregnant women and their fetuses are particularly sensitive to the effects of methemoglobinemia.

#### INHALATION:

Not a likely route of exposure. Elevated temperatures or mechanical action may form vapors, mists or fumes which may be irritating to the eyes, nose, throat and lungs.

### AGGRAVATION OF EXISTING CONDITIONS:

Sodium Nitrite. Pregnant women are particularly sensitive to methemoglobinemia.

### **HUMAN HEALTH HAZARDS - CHRONIC:**

Repeated ingestion of small amounts of sodium nitrite causes drops in blood pressure, rapid pulse, headaches and visual disturbances. It may also react with organic amines in the body to form carcinogenic nitrosamines.

### 4. FIRST AID MEASURES

#### EYE CONTACT:

Get immediate medical attention. PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT. Immediately flush eye with water for at least 15 minutes while holding eyelids open.

### SKIN CONTACT:

Get immediate medical attention. Immediately flush with plenty of water for at least 15 minutes. For a large splash, flood body under a shower. Remove contaminated clothing. Wash off affected area immediately with plenty of water. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use.

### INGESTION:

Get immediate medical attention. DO NOT INDUCE VOMITING. If conscious, washout mouth and give water to drink.

#### **INHALATION:**

Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

### NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.



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### 5. FIRE FIGHTING MEASURES

FLASH POINT:

> 200 F/ > 93.3 °C

### **EXTINGUISHING MEDIA:**

Not expected to burn. Use extinguishing media appropriate for surrounding fire.

#### FIRE AND EXPLOSION HAZARD:

Not flammable or combustible. If product is allowed to dry, the sodium nitrite is an oxidizing agent and can initiate the combustion of other materials. May evolve oxides of nitrogen (NOx) under fire conditions.

# SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

# 6. ACCIDENTAL RELEASE MEASURES

#### PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.

#### METHODS FOR CLEANING UP:

SMALL SPILLS: Do not allow product to evaporate to dryness. Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

### **ENVIRONMENTAL PRECAUTIONS:**

Very toxic to aquatic organisms., Prevent material from entering sewers or waterways., If drains, streams, soil or sewers become contaminated, notify local authority.

# 7. HANDLING AND STORAGE

### HANDLING:

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Do not mix with acids.

#### STORAGE CONDITIONS:

Store in suitable labeled containers. Store the containers tightly closed. Store away from organic chemicals and other oxidizable materials, reducing agents, acids and alkalis.



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# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMITS:

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

Substance(s)	Basis	ppm	mg/m3	Non-Standard Unit
Sodium Hydroxide	ACGIH/Ceiling NIOSH REL/Ceiling		2 2	S.III.
	OSHA Z1/TWA		2	

<sup>\*</sup> A skin notation refers to the potential significant contribution to overall exposure by the cutaneous route, including mucous membranes and the eyes.

#### **ENGINEERING MEASURES:**

General ventilation is recommended. Local exhaust ventilation may be necessary when dusts or mists are generated.

#### RESPIRATORY PROTECTION:

Where concentrations in air may exceed the limits given in this section or when significant mists, vapors, aerosols, or dusts are generated, an approved air purifying respirator equipped with suitable filter cartridges is recommended. Consult the respirator / cartridge manufacturer data to verify the suitability of specific devices. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

### HAND PROTECTION:

When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. Please contact the PPE manufacturer for advice on what type of glove material may be suitable. Gloves should be replaced immediately if signs of degradation are observed.

### SKIN PROTECTION:

When handling this product, the use of overalls, a chemical resistant apron and rubber boots is recommended. A full slicker suit is recommended if gross exposure is possible.

#### EYE PROTECTION:

Wear a face shield with chemical splash goggles.

#### HYGIENE RECOMMENDATIONS:

Use good work and personal hygiene practices to avoid exposure. Eye wash station and safety shower are necessary. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Liquid



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**APPEARANCE** 

Clear Light yellow

**ODOR** 

None

SPECIFIC GRAVITY

1.34 @ 77.0 °F / 25.0 °C

DENSITY

11.1 lb/gal

SOLUBILITY IN WATER

Complete

pH (100.0 %)

13.0

VOC CONTENT

0.0 % Calculated

Note: These physical properties are typical values for this product and are subject to change.

# 10. STABILITY AND REACTIVITY

### STABILITY:

Stable under normal conditions.

### HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

### CONDITIONS TO AVOID:

Avoid extremes of temperature. Do not allow product to evaporate to dryness. Dried product residue can act as an oxidizer.

### MATERIALS TO AVOID:

Acids Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors. Contact with reducing agents (e.g. hydrazine, sulfites, sulfide, aluminum or magnesium dust) may generate heat, fires, explosions and toxic vapors. Do not mix with amines. Sodium nitrite can react with certain amines to produce N-nitrosamines, many of which are cancer-causing agents to laboratory animals.

# HAZARDOUS DECOMPOSITION PRODUCTS:

Under fire conditions:

Oxides of nitrogen

# 11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

### **ACUTE DERMAL TOXICITY:**

Remarks:

Based on available data, the classification criteria are not met.

### **ACUTE INHALATION TOXICITY:**

Remarks:

Based on available data, the classification criteria are not met.



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### SENSITIZATION:

This product is not expected to be a sensitizer.

### **CARCINOGENICITY:**

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

### **HUMAN HAZARD CHARACTERIZATION:**

Based on our hazard characterization, the potential human hazard is: High

### 12. | ECOLOGICAL INFORMATION

#### **ECOTOXICOLOGICAL EFFECTS:**

The following results are for the product, unless otherwise indicated.

### Acute Fish Results:

Species	Exposure	Test Type	Value	Test Descriptor
Rainbow Trout	96 hrs	LC50	100.83 mg/l	Product

### **ACUTE INVERTEBRATE RESULTS:**

Species	Exposure	Test Type	Value	Test Descriptor
Daphnia magna	48 hrs	EC50	215.8 mg/l	Product

### PERSISTENCY AND DEGRADATION:

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

#### 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	Water	Soil/Sediment
<5%	30 <i>-</i> 50%	50 - 70%

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

### **BIOACCUMULATION POTENTIAL**

This preparation or material is not expected to bioaccumulate.



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### ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: High

If released into the environment, see CERCLA/SUPERFUND in Section 15.

# 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

Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.

### 14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

#### LAND TRANSPORT:

Proper Shipping Name:

CORROSIVE LIQUID, TOXIC, N.O.S

Technical Name(s):

SODIUM HYDROXIDE, SODIUM NITRITE

UN/ID No:

UN 2922

Hazard Class - Primary :

8

Hazard Class - Secondary : Packing Group :

6.1

Flash Point :

Ш

Reportable Quantity (per package) :

> 200 F/ > 93.3 °C 260 lbs

RQ Component:

SODIUM NITRITE

### AIR TRANSPORT (ICAO/IATA):

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Proper Shipping Name:

CORROSIVE LIQUID, TOXIC, N.O.S



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Technical Name(s):

SODIUM HYDROXIDE, SODIUM NITRITE

UN/ID No:

UN 2922

Hazard Class - Primary:

8

Hazard Class - Secondary :

6.1

Packing Group:

111

Reportable Quantity (per package):

260 lbs SODIUM NITRITE

RQ Component:

MARINE TRANSPORT (IMDG/IMO):

Proper Shipping Name:

CORROSIVE LIQUID, TOXIC, N.O.S.

Technical Name(s):

SODIUM HYDROXIDE, SODIUM NITRITE

UN/ID No:

UN 2922

Hazard Class - Primary: Hazard Class - Secondary: 8 6.1

Packing Group:

Ш

\*Marine Pollutant:

SODIUM NITRITE

\*Note: This product is regulated as a Marine Pollutant when shipped by Rail, Highway (in bulk quantities), or Air (if no other hazard class applies), and when shipped by water in all quantities.

#### 15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

### NATIONAL REGULATIONS, USA:

### OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910,1200:

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Sodium Hydroxide: Corrosive

Sodium Nitrite: Target Organ Effect - Kidney, Target Organ Effect - Nervous system, Target Organ Effect - Blood

### CERCLA/SUPERFUND, 40 CFR 302:

This product contains the following Reportable Quantity (RQ) Substance. Also listed is the RQ for the product. If a reportable quantity of product is released, it requires notification to the NATIONAL RESPONSE CENTER, WASHINGTON, D.C. (1-800-424-8802).

**RQ** Substance Sodium Nitrite

260 lbs



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SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

X Immediate (Acute) Health Hazard X Delayed (Chronic) Health Hazard

- Fire Hazard

Sudden Release of Pressure Hazard

- Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product contains the following substance(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals

 Hazardous Substance(s)
 CAS NO
 % (w/w)

 Sodium Nitrite
 7632-00-0
 20.0 - 40.0

### TOXIC SUBSTANCES CONTROL ACT (TSCA):

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

NSF NON-FOOD COMPOUNDS REGISTRATION PROGRAM (former USDA List of Proprietary Substances & Non-Food Compounds) :

NSF Registration number for this product is: 148340

This product is acceptable for treatment of cooling and retort water (G5) in and around food processing areas. This product is acceptable for treating boilers, steam lines, and/or cooling systems (G7) where neither the treated water nor the steam produced may contact edible products in and around food processing areas.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :

This product contains the following substances listed in the regulation. Additional components may be unintentionally present at trace levels.

Substance(s)	Citations
<ul><li>Sodium Hydroxide</li><li>Sodium Nitrite</li></ul>	Sec. 311



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CLEAN AIR ACT, Sec. 112 (Hazardous Air Pollutants, as amended by 40 CFR 63), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances):

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

### CALIFORNIA PROPOSITION 65:

Substances listed under California Proposition 65 are not intentionally added or expected to be present in this product.

### MICHIGAN CRITICAL MATERIALS:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

### STATE RIGHT TO KNOW LAWS:

The following substances are disclosed for compliance with State Right to Know Laws:

Sodium Hydroxide

1310-73-2

Sodium Nitrite

7632-00-0

# INTERNATIONAL CHEMICAL CONTROL LAWS:

#### CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

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

#### **AUSTRALIA**

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

#### **CHINA**

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).

#### **EUROPE**

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

#### **JAPAN**

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**

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)



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#### **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.

### **PHILIPPINES**

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).

### 16. OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

### **REFERENCES**

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (TOMES CPS™ CD-ROM Version),

Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH,

(TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By: Product Safety Department

Date issued: 08/22/2013 Version Number: 1.7