

## SAFETY DATA SHEET

**NALCO® EC6110A**

### Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCO® EC6110A

Other means of identification : Not applicable.

Recommended use : BIOCIDES

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

Company : Nalco Champion Company  
7705 Highway 90-A  
Sugar Land, Texas 77478  
USA  
TEL: (281) 263-7000

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

Issuing date : 04/28/2015

### Section: 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute toxicity (Oral) : Category 3  
Acute toxicity (Inhalation) : Category 4  
Acute toxicity (Dermal) : Category 3  
Skin corrosion : Category 1B  
Serious eye damage : Category 1  
Respiratory sensitization : Category 1  
Skin sensitization : Category 1  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

#### GHS Label element

Hazard pictograms :



Signal Word :

Danger

Hazard Statements :

Toxic if swallowed or in contact with skin  
Harmful if inhaled.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.

Precautionary Statements :

**Prevention:**  
Do not breathe dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using

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this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection. Wear respiratory protection.

**Response:**

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 skin irritation or rash occurs: Get medical advice/ attention. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards** : None known.

## Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

| Chemical Name                | CAS-No.     | Concentration: (%) |
|------------------------------|-------------|--------------------|
| Glutaraldehyde               | 111-30-8    | 30 - 60            |
| Quaternary ammonium compound | Proprietary | 5 - 10             |
| Methanol                     | 67-56-1     | 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.

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.

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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 : Not flammable or combustible.

Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides nitrogen oxides (NOx) Hydrogen chloride

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 out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Suitable material : Keep in properly labelled containers.

Unsuitable material : not determined

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## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

| Components     | CAS-No.  | Form of exposure | Permissible concentration        | Basis     |
|----------------|----------|------------------|----------------------------------|-----------|
| Glutaraldehyde | 111-30-8 | Ceiling          | 0.2 ppm<br>0.8 mg/m <sup>3</sup> | NIOSH REL |
|                |          | Ceiling          | 0.05 ppm                         | ACGIH     |
| Methanol       | 67-56-1  | TWA              | 200 ppm                          | ACGIH     |
|                |          | STEL             | 250 ppm                          | ACGIH     |
|                |          | TWA              | 200 ppm<br>260 mg/m <sup>3</sup> | NIOSH REL |
|                |          | STEL             | 250 ppm<br>325 mg/m <sup>3</sup> | NIOSH REL |
|                |          | TWA              | 200 ppm<br>260 mg/m <sup>3</sup> | 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 the following personal protective equipment:  
Standard glove type.  
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 : clear  
Odour : Characteristic, Aldehyde  
Flash point : does not flash  
pH : 3.1 - 4.5, 100 %  
Odour Threshold : no data available  
Melting point/freezing point : FREEZING POINT: -13.8 °C

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|   |                      |
|---|----------------------|
| Initial boiling point and boiling range | : 100.6 °C           |
| 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                         | : 16 mm Hg (20 °C)   |
| Relative vapour density                 | : no data available  |
| Relative density                        | : 1.1 (20 °C)        |
| Density                                 | : 9.14 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 temperature       | : no data available  |
| Viscosity, dynamic                      | : 200.000 mPa.s      |
| Viscosity, kinematic                    | : 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                | : Freezing temperatures.<br>High temperatures   |
| Incompatible materials             | : Strong oxidizing agents<br>Strong acids<br>Strong Bases<br>Contact with these may cause a heat-generating reaction which is not expected to be violent. |
| Hazardous decomposition products   | : Decomposition products may include the following materials:<br>Carbon oxides<br>nitrogen oxides (NOx)<br>Hydrogen chloride                              |

### Section: 11. TOXICOLOGICAL INFORMATION

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

#### Potential Health Effects

|      |   |
|------|---|
| Eyes | : Causes serious eye damage.                                |
| Skin | : Toxic in contact with skin. Causes severe skin burns. May |

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cause allergic skin reaction.

- Ingestion : Toxic if swallowed. Causes digestive tract burns.
- Inhalation : May cause allergic respiratory reaction. May cause respiratory tract irritation. Harmful if inhaled. May cause nose, throat, and lung irritation.
- Chronic Exposure : Health injuries are not known or expected under normal use.

## Experience with human exposure

- Eye contact : Redness, Pain, Corrosion
- Skin contact : Redness, Pain, Irritation, Corrosion, Allergic reactions
- Ingestion : Corrosion, Abdominal pain
- Inhalation : Respiratory irritation, Cough, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## Toxicity

### Product

- Acute oral toxicity : no data available
- 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 : Mutagenicity in vitro tests of Chinese hamster ovary, sister chromatid exchange and unscheduled DNA synthesis did not produce dose-related responses. Oral doses of 30 and 60 mg/kg to mice showed no effect in the dominant lethal assay. In all five strains of Salmonella, with and without metabolic activation by S9 liver homogenate, no mutagenic response was noted.
- Teratogenicity : Doses of 25 and 50 mg/kg given by gavage to pregnant rats produced decreases in maternal body weight. There were no other indications of maternal toxicity nor was there evidence of fetotoxicity or external, visceral or skeletal abnormalities. Mice (CD-1 strain) given 100 mg/kg by gavage showed fetotoxicity

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as evidenced by decreased body weight. At lower doses, there was no evidence of fetotoxicity or skeletal abnormalities. No evidence of teratogenic effects were noted in either species.

STOT - single exposure : no data available

STOT - repeated exposure : no data available

Aspiration toxicity : no data available

#### Components

Acute oral toxicity : Glutaraldehyde  
LD50 rat: 150 mg/kg

Quaternary ammonium compound  
LD50 rat: 344 mg/kg

#### Components

Acute inhalation toxicity : Glutaraldehyde  
LC50 rat: > 0.5 mg/l  
Exposure time: 4 h

Quaternary ammonium compound  
LC50 rat: > 0.054 mg/l  
Exposure time: 4 h

#### Components

Acute dermal toxicity : Quaternary ammonium compound  
LD50 rabbit: 3,340 mg/kg

### Section: 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : Very toxic to aquatic life.

#### Components

Toxicity to fish : Methanol  
LC50 : 15,400 mg/l  
Exposure time: 96 h

#### Components

Toxicity to daphnia and other aquatic invertebrates : Glutaraldehyde  
EC50 Daphnia: 0.35 mg/l  
Exposure time: 48 h

Quaternary ammonium compound  
EC50 : 0.0059 mg/l  
Exposure time: 48 h

Methanol  
EC50 : > 10,000 mg/l  
Exposure time: 48 h

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### Components

Toxicity to algae : Methanol  
EC50 : 22,000 mg/l  
Exposure time: 72 h

### Components

Toxicity to bacteria : Methanol  
> 1,000 mg/l

### Components

Toxicity to fish (Chronic toxicity) : Methanol  
NOEC: 7,900 mg/l  
Exposure time: 8.3 d

### Persistence and degradability

no data available

### Mobility

no data available

### Bioaccumulative potential

no data available

### Other information

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The classification or waste code may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Disposal methods : Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.  
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



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

## Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S  
Technical name(s) : GLUTARALDEHYDE  
UN/ID No. : UN 2922  
Transport hazard class(es) : 8, 6.1  
Packing group : II

## Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S  
Technical name(s) : GLUTARALDEHYDE, ALKYL DIMETHYL BENZYL  
AMMONIUM CHLORIDE  
UN/ID No. : UN 2922  
Transport hazard class(es) : 8, 6.1  
Packing group : II

## Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S  
Technical name(s) : GLUTARALDEHYDE, ALKYL DIMETHYL BENZYL  
AMMONIUM CHLORIDE  
UN/ID No. : UN 2922  
Transport hazard class(es) : 8, 6.1  
Packing group : II

\*Marine pollutant : GLUTARALDEHYDE

\*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.

## Section: 15. REGULATORY INFORMATION

EPA Reg. No. : 464-702-68708

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

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### 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

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

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### California Prop 65

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WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Methanol

67-56-1

### INTERNATIONAL CHEMICAL CONTROL LAWS :

#### TOXIC SUBSTANCES CONTROL ACT (TSCA)

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

#### CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

This product contains substance(s) which are not listed on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

#### AUSTRALIA

This product contains substance(s) which are not in compliance with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS) and may require additional review.

#### CHINA

This product contains substance(s) which are not in compliance with the Provisions on the Environmental Administration of New Chemical Substances and may require additional review.

#### JAPAN

This product contains substance(s) which are not in compliance with the Law Regulating the Manufacture and Importation Of Chemical Substances and are not listed on the Existing and New Chemical Substances list (ENCS).

#### KOREA

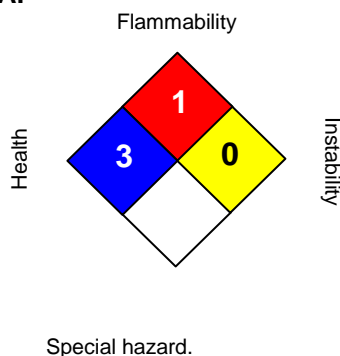
This product contains substance(s) which are not in compliance with the Toxic Chemical Control Law (TCCL) and may require additional review.

#### PHILIPPINES

This product contains substance(s) which are not in compliance with the Republic Act 6969 (RA 6969) and may require additional review.

### Section: 16. OTHER INFORMATION

#### NFPA:



#### HMIS III:

|                        |           |
|------------------------|-----------|
| <b>HEALTH</b>          | <b>3*</b> |
| <b>FLAMMABILITY</b>    | <b>1</b>  |
| <b>PHYSICAL HAZARD</b> | <b>0</b>  |

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

Revision Date : 04/28/2015  
Version Number : 1.0  
Prepared By : Regulatory Affairs

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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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