

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCO® 2B11

Other means of identification : Not applicable.

Recommended use : ALKALINITY CONTROL

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 : 03/19/2018

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion : Category 1A
Serious eye damage : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**
Keep only in original container. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. 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. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
Storage:
Store in corrosive resistant stainless steel container with a resistant inner liner.

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Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Sodium Hydroxide	1310-73-2	30 - 60

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 : Not flammable or combustible.

Hazardous combustion products : Carbon oxides 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.

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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 : Do not store near acids. 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: Stainless Steel 304, Stainless Steel 316L, HDPE (high density polyethylene), MDPE, EPDM, Neoprene, Nitrile, Perfluoroelastomer, PTFE, TFE, FEP (encapsulated), Fluoroelastomer
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Carbon steel

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Sodium Hydroxide	1310-73-2	Ceiling	2 mg/m ³	ACGIH
		Ceiling	2 mg/m ³	NIOSH REL
		TWA	2 mg/m ³	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.

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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 : Colorless
- Odour : None
- Flash point : Not applicable.
- pH : 14,(100 %), Method: ASTM E 70
- Odour Threshold : no data available
- Melting point/freezing point : FREEZING POINT: 14 °C, ASTM D-1177
- Initial boiling point and boiling range : 143 °C, Method: ASTM D 86
- 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 : 1.5 mm Hg, (20 °C), ASTM D 323,
- Relative vapour density : no data available
- Relative density : 1.48 - 1.54, (25 °C), ASTM D-1298
- Density : 1.48 - 1.54 g/cm³ , 12.6 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 : 100 mPa.s (20 °C), Method: ASTM D-2983
- Viscosity, kinematic : 40 mm²/s (20 °C)
- Molecular weight : no data available

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VOC : 0 %, 0 g/l, EPA Method 24

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 : Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors.
Contact with reactive metals (e.g. aluminum) may result in the generation of flammable hydrogen gas.

Hazardous decomposition products : Carbon oxides
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 : Causes digestive tract burns.

Inhalation : 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, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity : no data available

Acute inhalation toxicity : no data available

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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

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : LC50 Fathead Minnow: > 10,000 mg/l
Exposure time: 48 hrs
Test substance: Product

LC50 Fathead Minnow: > 10,000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Fathead Minnow: 10,000 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Ceriodaphnia dubia: 2,332 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC Ceriodaphnia dubia: 1,296 mg/l
Exposure time: 48 hrs
Test substance: Product

Persistence and degradability

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

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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.

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	:	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	:	SODIUM HYDROXIDE SOLUTION
Technical name(s)	:	
UN/ID No.	:	UN 1824
Transport hazard class(es)	:	8
Packing group	:	II
Reportable Quantity (per package)	:	2,000 lbs

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RQ Component : SODIUM HYDROXIDE

Air transport (IATA)

Proper shipping name : SODIUM HYDROXIDE SOLUTION
Technical name(s) :
UN/ID No. : UN 1824
Transport hazard class(es) : 8
Packing group : II
Reportable Quantity (per package) : 2,000 lbs
RQ Component : SODIUM HYDROXIDE

Sea transport (IMDG/IMO)

Proper shipping name : SODIUM HYDROXIDE SOLUTION
Technical name(s) :
UN/ID No. : UN 1824
Transport hazard class(es) : 8
Packing group : II

Section: 15. REGULATORY INFORMATION

TSCA list : Not relevant

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium Hydroxide	1310-73-2	1000	2000

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

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)

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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).

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)

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

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

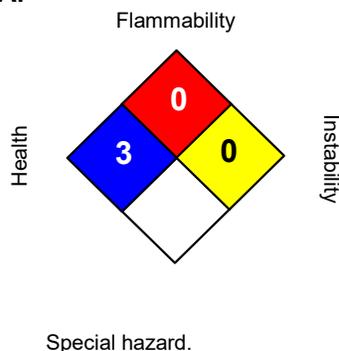
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

Taiwan Chemical Substance Inventory

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

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

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

Revision Date : 03/19/2018
Version Number : 1.4
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.

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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. For additional copies of an SDS visit www.nalco.com and request access.



NEW CHEMICAL ADDITIVES REQUEST FORM INSTRUCTIONS

“Chemical additive” means a chemical product (including products of disassociation and degradation, collectively “products”) introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for the production of goods or chemicals used in the treatment of wastewater.

The Department of Environmental Protection (DEP) maintains a list of chemical additives (“Approved List”) on its website that are approved for general use for industrial operations with NPDES permits (see www.dep.pa.gov/chemicaladditives). If required by the facility’s NPDES permit, an industrial facility may be limited to using those chemical additives on the Approved List. When a chemical additive is not identified on the Approved List and usage is desired, chemical manufacturers or facilities themselves may submit the New Chemical Additives Request Form to request the addition of a chemical additive to the Approved List.

The following provides general instructions on completing the form. **Please note that failure to provide all of the requested information will result in a delay in approving the chemical additive.**

1. Indicate whether the organization that is submitting the form is a permittee or the manufacturer of the chemical additive. If a permittee is submitting the form, identify the permittee name, permit number, permit effective and expiration dates, facility name, and the municipality and county where the facility is located. If a manufacturer is submitting the form, this section may remain blank.
2. Identify the trade name of the chemical additive. This is the name that should be identified on the Material Safety Data Sheet (MSDS).
3. Identify the manufacturer name of the chemical additive.
4. List the intended use(s) of the chemical additive.
5. At a minimum, report the whole product toxicity test result (48-hour LC₅₀ or EC₅₀), in mg/L, for a species in one of the following three genera of the family Daphnidae - Ceriodaphnia sp., Daphnia sp., or Simocephalus sp. All other whole product aquatic toxicity testing data should be reported on a separate sheet or the MSDS.
6. Identify the species tested for the LC₅₀ or EC₅₀ value(s) reported in No. 5 by checking the appropriate box(es).
7. In the table provided, list each of the product ingredients and its Chemical Abstract Services (CAS) number for the chemical additive. Also provide the percent composition and whether the composition reported is by weight or volume. **A complete list of ingredients is required**; permittees should contact the product manufacturer if all ingredients are not listed on the MSDS. If this information is proprietary, please indicate that it should be treated confidentially via cover letter or email.
8. List the analytical method from Pa. Code 25 Chapter 16 (Appendix A, Tables 2A and 2B) or other sources that may be used to determine the effluent concentration of the chemical additive or, if none exists for the chemical additive, then the active ingredient of the additive. If the analytical method is not approved by DEP or EPA, you should attach a copy of the method procedures. If no methods exist according to available information, indicate this on the form.
9. Provide the method detection limit for the analytical method in mg/L.
10. The form must be signed and dated by a responsible official of the organization submitting the request. Also provide the submitter’s phone number and email address in the event DEP needs to contact the submitter for clarification or additional information.

An MSDS form must be attached to the New Chemical Additives Request Form. MSDS forms should contain the minimum requirements of the Occupational Safety and Health Administration's (OSHA's) regulations at 29 CFR 1910.1200(g). In addition, aquatic ecotoxicity information should be identified on the MSDS form or on a separate sheet. If the MSDS form does not contain the minimum required information, DEP may be unable to process the request for a new additive.

Send the completed form with attachments to DEP via email at RA-EPNPDES_PERMITS@pa.gov. If the form and attachments cannot be submitted via email, mail them to the following address:

DEP Bureau of Clean Water
NPDES Permitting Division
Rachel Carson State Office Building
PO Box 8774
Harrisburg, PA 17105-8774



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

28 May 2020

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To whom it may concern,

Thank you for your interest in NALCO® 2B11.

This product contains the following components:

Substance Name	CAS Number	Percent (wt)
Sodium Hydroxide	1310-73-2	50.0000 %
Water	7732-18-5	50.0000 %

This compositional information for NALCO® 2B11 is considered proprietary by our company. It is being released with the expectation that it will be viewed only by those employees of your company that have a need to know.