

PRODUCT

**NALCO® 7330****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**PRODUCT NAME : **NALCO® 7330**APPLICATION : **BIOCIDES**

COMPANY IDENTIFICATION :

CHINA :	NALCO INDUSTRIAL SERVICES (SUZHOU) CO LTD	TEL: 86-512-68255001	FAX: 86-512-68250130
INDIA :	NLC NALCO INDIA LIMITED	TEL: 9133 2674 0395	FAX: 91-33-22296858
INDONESIA :	PT. NALCO INDONESIA	TEL: 62-21-8753175	FAX: 62-21-8753167
MALAYSIA :	NALCO INDUSTRIAL SERVICES MALAYSIA SDN BHD	TEL: 603-5569 4118	FAX: 603-5569 5955
PHILIPPINES :	NALCO PHILIPPINES INC.	TEL: 63-49-5451550	FAX: 63-49-5453442
SINGAPORE :	NALCO PACIFIC PTE LTD	TEL: 65- 6505-6868	FAX: 65-6862 0850
THAILAND :	NALCO INDUSTRIAL SERVICES (THAILAND) CO LTD	TEL: 66-38-955-160	FAX: 66-38-955-166

Date issued : 29.10.2009

Version Number : 1.2

See Section 16 for address information.

EMERGENCY TELEPHONE NUMBER(S) : For local telephone numbers, refer to Section 16.  
International Emergency Number: + 65 6542 9595**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).

CHEMICAL NAME	CAS NO	% (w/w)
5-Chloro-2-Methyl-4-Isothiazolin-3-one	26172-55-4	1 - 5
2-Methyl-4-Isothiazolin-3-one	2682-20-4	0.1 - 1

The balance of the substances in this product are not classified as hazardous or are present below hazard cut-off limits

**3. HAZARDS IDENTIFICATION**

HUMAN HEALTH HAZARDS - ACUTE

EYE CONTACT

Corrosive. Will cause eye burns and permanent tissue damage.

SKIN CONTACT

May cause severe irritation or tissue damage depending on the length of exposure and the type of first aid administered. Repeated or prolonged contact may cause skin sensitization. Skin irritation effects can be delayed for hours.

INGESTION

Not a likely route of exposure. Corrosive; causes chemical burns to the mouth, throat and stomach.

INHALATION

Not a likely route of exposure. Irritating, in high concentrations, to the eyes, nose, throat and lungs.

**HUMAN HEALTH HAZARDS - CHRONIC :**

No adverse effects expected other than those mentioned above.

**ENVIRONMENTAL HAZARDS :**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**4. FIRST AID MEASURES****EYE CONTACT :**

**PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT.** Immediately flush eye with water for at least 15 minutes while holding eyelids open. If only one eye is affected be sure to use care not to contaminate the other eye with the run-off. Get immediate medical attention.

**SKIN CONTACT :**

**PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT.** 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. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use.

**INGESTION :**

**DO NOT INDUCE VOMITING.** If conscious, washout mouth and give water to drink. If reflexive vomiting occurs, rinse mouth and repeat administration of water. Get immediate medical attention.

**INHALATION :**

Get immediate medical attention. Remove to fresh air, treat symptomatically.

**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.

**5. FIRE FIGHTING MEASURES**

**FLASH POINT :** Not flammable

**EXTINGUISHING MEDIA :**

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

**FIRE AND EXPLOSION HAZARD :**

Not flammable or combustible. May evolve oxides of carbon (COx) under fire conditions. May evolve HCl under fire conditions. May evolve oxides of nitrogen (NOx) and sulfur (SOx) 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.

**SENSITIVITY TO STATIC DISCHARGE :**

Not expected to be sensitive to static discharge.

**6. ACCIDENTAL RELEASE MEASURES**

## PERSONAL PRECAUTIONS :

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

## METHODS FOR CLEANING UP :

**SMALL SPILLS:** 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. **DEACTIVATION SOLUTION** - Estimate volume of remaining spilled material on the floor and prepare 10 times as much deactivation solution as follows. Prepare fresh by mixing 5% sodium hypochlorite (household bleach) and 5% sodium bicarbonate or potassium bicarbonate away from the immediate area of the spill. The solution can be prepared by adding household bleach to the 3-quart fill mark on the 1 gallon plastic container containing 1/3 of a lb. (150 grams) of sodium bicarbonate. Put on the appropriate personal protection equipment and close the container securely and shake well for 1 minute. The materials and equipment for preparing solutions should be kept available for use in areas where spills may occur. 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 :

This product may pose a risk to the aquatic ecosystem if released., In the event of a spill, 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. Avoid generating aerosols and mists. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Skin reaction can be delayed and therefore wetting of the skin and/or clothes does not always give an indication of contamination. Treat all wetting of the skin and/or clothes which occurs during handling as contact with the product and administer first aid immediately.

## STORAGE CONDITIONS :

Protect product from freezing. Store in suitable labeled containers. Store the containers tightly closed. Keep container in a well-ventilated place.

## SUITABLE CONSTRUCTION MATERIAL :

Hastelloy C-276, Polyethylene, HDPE (high density polyethylene), EPDM, Plexiglass, Teflon, Kalrez, Alfax, Stainless Steel 316L, Nylon

## UNSUITABLE CONSTRUCTION MATERIAL :

Mild steel, Carbon Steel C1018, Stainless Steel 304, Copper, Aluminum, Brass, Buna-N, Polypropylene, PVC, Ethylene propylene, Neoprene, Polyurethane, Viton, Hypalon

**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.

Country/Source	Substance(s)	Category:	ppm	mg/m3
Manufacturer's Recommendation	5-Chloro-2-Methyl-4-Isothiazolin-3-one	TWA		0.076
		STEL		0.23
Manufacturer's Recommendation	2-Methyl-4-Isothiazolin-3-one	TWA		1.5
		STEL		4.5

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

**MONITORING MEASURES :**

A small volume of air is drawn through an absorbant or barrier to trap the substance(s) which can then be desorbed or removed and analyzed as referenced below:

Substance(s)	Method	Analysis	Absorbant
5-Chloro-2-Methyl-4-Isothiazolin-3-one	No method identified		
2-Methyl-4-Isothiazolin-3-one	No method identified		

**ENGINEERING MEASURES :**

General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor.

**PERSONAL PROTECTION**

**GENERAL ADVICE :**

The use and choice of personal protection equipment is related to the hazard of the product, the workplace and the way the product is handled. In general, we recommend as a minimum precaution that safety glasses with side-shields and workclothes protecting arms, legs and body be used. In addition any person visiting an area where this product is handled should at least wear safety glasses with side-shields.

**RESPIRATORY PROTECTION :**

An approved respirator must be worn if the occupational exposure limit is likely to be exceeded. An organic vapor cartridge with dust/mist prefilter or supplied air may be used. 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 :**

PVC or nitrile Butyl rubber Gloves should be replaced immediately if signs of degradation are observed. Breakthrough time not determined as preparation, consult PPE manufacturers.

**SKIN PROTECTION :**

Wear protective overalls, chemical splash goggles and impervious gloves. 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. Keep an eye wash fountain available. Keep a safety shower available. 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
APPEARANCE	Light yellow Green
ODOR	Mild
pH (100 %)	3.0 - 5.0 ASTM E-70
VAPOR PRESSURE	No data available.
VAPOR DENSITY	No data available.
SPECIFIC GRAVITY	1.026 (25 °C)
DENSITY	No data available.
SOLUBILITY IN WATER	Complete
MELTING POINT	-3 °C
BOILING POINT	100 °C ASTM D-86
FLASH POINT	Not flammable
LOWER EXPLOSION LIMIT	Not flammable
UPPER EXPLOSION LIMIT	Not flammable
AUTOIGNITION TEMPERATURE	No data available.

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 :**

Freezing temperatures.

**MATERIALS TO AVOID :**

Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

**HAZARDOUS DECOMPOSITION PRODUCTS :**

Under fire conditions: Oxides of carbon, Oxides of nitrogen, Oxides of sulfur, HCl

**11. TOXICOLOGICAL INFORMATION****ACUTE TOXICITY DATA :**

The following results are for the product along with results on the active substances.

**ACUTE ORAL TOXICITY :**

Species: Rat  
 LD50: 3,810 mg/kg  
 Test Descriptor: Product

**ACUTE DERMAL TOXICITY :**

Species: Rabbit  
 LD50: > 5,000 mg/kg  
 Test Descriptor: Product

**ACUTE INHALATION TOXICITY :**

Species: Rat  
 LD50: 13.7 mg/l (4 hrs)  
 Test Descriptor: Product

**SENSITIZATION :**

Repeated or prolonged contact may cause sensitization in some individuals. A Guinea pig (Buehler Technique) sensitization study with an induction dosage of 90 ppm of active ingredients followed by an insult of 429 ppm of active ingredients was positive. A human repeated insult patch study of 28 ppm active ingredients followed by an insult of 56 ppm of active ingredients resulted in no effect to the subjects tested.

**CHRONIC TOXICITY DATA :**

A 90-day dietary study in dogs of 840 ppm of isothiazolinone resulted in no mortalities or pathological findings. A 90-day dermal study in rabbits of 0.4 mg/kg/day of isothiazolinone resulted in irritation but no pathological effects. A 30-month skin painting study with mice using 400 ppm isothiazolinone three times per week showed no increased tumor frequency over control. A teratology study with rabbits and rats was negative using dosages of 1.5 to 15 mg/kg isothiazolinone. Mutagenicity results have been equivocal.

**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).

For additional information on the hazard of the preparation, please consult section 2 and 12.

**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 along with results on the active substances.

**ACUTE FISH RESULTS :**

Species	Exposure	LC50	Test Descriptor
Sheepshead Minnow	96.00 hrs	32.000 mg/l	Product
Bluegill Sunfish	96 hrs	18.67 mg/l	Product

Rainbow Trout	96 hrs	12.67 mg/l	Product
Inland Silverside	96 hrs	16.62 mg/l	Product
Bluegill Sunfish	96 hrs	0.28 mg/l	Active Substance
Rainbow Trout	96 hrs	0.19 mg/l	Active Substance

**ACUTE INVERTEBRATE RESULTS :**

Species	Exposure	LC50	EC50	Test Descriptor
Mysid Shrimp ( <i>Mysidopsis bahia</i> )	96.00 hrs	18.000 mg/l		Product
<i>Daphnia magna</i>	48 hrs	0.16 mg/l		Active Substance

**AQUATIC PLANT RESULTS :**

Species	Exposure	EC50/LC50	NOEC	Test Descriptor
Marine Algae ( <i>Skeletonema costatum</i> )		0.003 mg/l		Active Substance
Green Algae ( <i>Pseudokirchneriella subcapitata</i> , previously <i>Selenastrum capricornutum</i> )		0.018 mg/l		Active Substance

**ADDITIONAL ECOLOGICAL DATA**

Product contains organic halogens, may contribute to AOX. Discharge in minor quantity into adapted biological units of sewage treatment plants is not expected to affect the efficiency of the activated sludge process.

**MOBILITY AND BIOACCUMULATION POTENTIAL :**

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 - 50%	50 - 70%

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

This preparation or material is not expected to bioaccumulate.

**PERSISTENCY AND DEGRADATION :**

Total Organic Carbon (TOC) : 7,850 mg/l

Chemical Oxygen Demand (COD) : 20,000 mg/l

The degradation of the major active substance begins with ring opening and elimination of chloride ion. Degradation leads to the formation of a variety of small organic acids, methylamine, carbon dioxide and elemental sulfur. The half life of each active substance is dependent upon the initial concentration.

## ENVIRONMENTAL HAZARD CHARACTERIZATION

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

**13. DISPOSAL CONSIDERATIONS**

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.

Empty drums should be taken for recycling, recovery, or disposal through a suitably qualified or licensed contractor.

## NATIONAL REGULATIONS, CHINA

Comply with local regulations.

## NATIONAL REGULATIONS, INDIA

Dispose of unused product in accordance with the "Hazardous Wastes (Management and Handling) Rules 1989" and local and State legislation, as applicable.

## NATIONAL REGULATIONS, INDONESIA

Dispose of unused product in accordance with "Government Regulation No.85/1999 on Amendment of Government Regulation No. 18/1999 regarding Hazardous and Toxic Waste Management", which also replaces Government Regulation No. 19/1994 and No.12/1995, (and amendments) as applicable.

## NATIONAL REGULATIONS, MALAYSIA

Dispose of in accordance with the Environmental Quality (Scheduled Wastes) Regulation 1989 and other guidelines issued by DOE and/or local authorities.

## NATIONAL REGULATIONS, PHILIPPINES

Dispose of in accordance with Presidential Decree No. 984-1976 ("The Pollution Control Law"); DENR Department Administrative Order No.29-92 ("The Implementing Rules or Regulations of RA6969") and Presidential Decree No.825.

## NATIONAL REGULATIONS, SINGAPORE

Dispose of waste in accordance with the Environmental Health Act (Chapter 95, Rg 11), Environmental Public Health (Toxic Industrial Waste) Regulations 1990 Ed.

## NATIONAL REGULATIONS, THAILAND

Dispose of hazardous waste in accordance with the " The Notification of the Ministry of Industry B.E. 2548, subject : Disposal of Wastes or Unusable Materials".

**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.

## LAND TRANSPORT

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No :	UN 3265
Hazard Class - Primary :	8



Packing Group : II  
HAZCHEM CODE : 2X

**NATIONAL REGULATIONS, CHINA**  
Comply with local regulations.

**NATIONAL REGULATIONS, INDIA**  
Transport in accordance with the Central Motor Vehicles Rules 1989.

**NATIONAL REGULATIONS, INDONESIA**  
Transport in accordance with all government regulations, including "Regulation of the Minister of Transportation No. 69/1993 on Land Transportation".

**NATIONAL REGULATIONS, MALAYSIA**  
There are no regulations specifically governing the transport of chemicals. Use best practice.

**NATIONAL REGULATIONS, PHILIPPINES**  
Transport in accordance with the following legislation (as applicable): Presidential Decree No. 1185, 1977 ("Fire Code of the Philippines") and implementing rules and regulations; Presidential Decree No. 856, 1975 ("Code of Sanitation"); Republic Act No 6969, 1990 ("Toxic Substances and Hazardous and Nuclear Wastes Control Act") and implementing rules and regulations.

**NATIONAL REGULATIONS, SINGAPORE**  
Land Transport complies with the Environmental Pollution Control (Hazardous Substances) Regulations 1999, which follows the "Specification for Caution Labelling for Hazardous Substances" - Singapore Standard 286 (1984).

**NATIONAL REGULATIONS, THAILAND**  
The product should be transported in accordance with "Hazardous Substances Acts B.E.2535", "Notification of Ministry of Public Health Re: Label and Level of Toxicity of Dangerous Articles Which are Under the Responsibility of Food and Drug Administration 2534 (If applicable)" and "Notification of Land Transportation Department, Subject : Label of truck which contain hazardous material, Notification date : 14 November B.E.2543 (14 November 2000)".

**AIR TRANSPORT (ICAO/IATA)**

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No :	UN 3265
Hazard Class - Primary :	8
Packing Group :	II
IATA Cargo Packing Instructions :	812
IATA Cargo Aircraft Limit :	30 L (Max net quantity per package)
IATA Passenger Packing Instructions :	Y808 / 808
IATA Passenger Aircraft Limit :	0.5 L / 1 L

**MARINE TRANSPORT (IMDG/IMO)**

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No :	UN 3265
Hazard Class - Primary :	8
Packing Group :	II
EmS-Nr. :	F-A, S-B

**15. REGULATORY INFORMATION****NATIONAL REGULATIONS EUROPE :**

## HAZARD SYMBOLS



## CORROSIVE

Contains:..A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

## RISK PHRASES

R34 - Causes burns.

R43 - May cause sensitization by skin contact.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**NATIONAL REGULATIONS, MALAYSIA :**

## HAZARD SYMBOLS



## CORROSIVE

Contains:..A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

## RISK PHRASES

R34 - Causes burns.

R43 - May cause sensitization by skin contact.

## SAFETY PHRASES

S23 - Do not breathe vapor.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash immediately with plenty of water.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**INTERNATIONAL REGULATIONS**

## NFPA RATING

HEALTH : 3 FLAMMABILITY : 0 INSTABILITY : 0 OTHER :  
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

## FOOD AND DRUG ADMINISTRATION (FDA) Federal Food, Drug and Cosmetic Act :

When use situations necessitate compliance with FDA regulations, this product is acceptable under : 21 CFR 176.300 Slimicides 21 CFR 176.170 Components of paper and paperboard in contact with aqueous and fatty foods and 21 CFR 176.180 Components of paper and paperboard in contact with dry foods. 21 CFR 176.170 Components of paper and paperboard in contact with aqueous and fatty foods and 21 CFR 176.180 Components of paper and paperboard in contact with dry foods.

The following limitations apply:

Maximum dosage

FOR 176.300: 0.125% (ACTIVES)

FOR 176.170/180: 1675 PPM

Limitation

of dry weight fiber

as an antimicrobial agent for finished coating formulations and for additives used in the manufacture of paper and paperboard, including fillers, binders, pigment slurries and sizing solutions

FOR 176.170/180: 3350 PPM

as an antimicrobial agent for polymer latex emulsions in paper coatings

**INTERNATIONAL CHEMICAL CONTROL LAWS**

## AUSTRALIA

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

## UNITED STATES :

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

## CANADA :

Substances regulated under the Pest Control Products Act are exempt from CEPA New Substance Notification requirements.

## 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).

## CHINA

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

## KOREA

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

**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).

**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.

**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.

NALCO INDUSTRIAL SERVICES (SUZHOU) CO LTD; 88 Ta Yuan Road, Suzhou New Development Zone, Jiangsu 215011 PRC

NLC NALCO INDIA LIMITED; 20/A Park St, Culcutta 700016 India

PT. NALCO INDONESIA; Jl. Pahlawan, Desa Karang Asem Timur, Citeureup, Bogor, Indonesia

NALCO INDUSTRIAL SERVICES MALAYSIA SDN BHD; No 1, Jalan Jururancang U1/21, Seksyen U1, Hicom-Glenmarie Industrial Park, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia

NALCO PHILIPPINES INC.; Barrio Real, Calamba, Laguna, Philippines

NALCO PACIFIC PTE LTD; 21 Gul Lane, Singapore 629416

NALCO INDUSTRIAL SERVICES (THAILAND) CO LTD; Rayong Plant, 109/19 M00 4, Eastern Seaboard Industrial Estate, Soi ESIE 6, T. Pluakdaeng, A. Pluakdaeng Rayong 21140 Thailand

**EMERGENCY TELEPHONE NUMBER(S) :**

<b>CHINA :</b>	<b>0080025378747 and 0065 6542 9595</b>
<b>INDIA :</b>	<b>+65 6542 9595</b>
<b>INDONESIA :</b>	<b>+65 6542 9595</b>
<b>MALAYSIA :</b>	<b>03 5569 4054</b>
<b>PHILIPPINES :</b>	<b>1800 10 8421250</b>
<b>SINGAPORE :</b>	<b>6542 9595</b>
<b>THAILAND :</b>	<b>02-104-0545</b>

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.

Prepared By: Nalco Asia Pacific, Safety, Health and Environment (SHE) Specialist