

Product Bulletin

NALCO® 7330

Cooling Water Treatment Biocide

PRODUCT DESCRIPTION AND APPLICATION

NALCO 7330 is a broad-spectrum, non-oxidizing biocide approved for use in recirculating cooling towers, closed loop cooling systems, air washers and brewery pasteurizers.

PHYSICAL & CHEMICAL PROPERTIES

These properties are typical. Refer to the Material Safety Data Sheet (MSDS) for the most current data.

Form:	Liquid
Color:	Pale Yellow to Green
Odor:	Mild
Solubility In Water:	Complete
Density:	8.6 lb/gal
Specific Gravity:	1.03
pH (Neat):	3.0-5.0
Freeze-Thaw Recovery:	Complete
Freeze Point:	25°F [-4°C]
Flash Point (PMCC):	None (TCC)

ACTIVE CONSTITUENTS

Component	Function
5-chloro-2-methyl-4-isothiazolin-3-one	Blocide
2-methyl-4-isothiazolin-3-one	Biocide

REGULATORY APPROVALS

NALCO 7330 must be applied according to appropriate national and local regulations.

NALCO 7330 is registered for use in the United States. As with all blockdes applied in the United States, NALCO 7330 is regulated by the U.S. EPA under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of federal law to use this product or any blockde in a manner inconsistent with its product label.

U.S. EPA Registration Number 1706-153 is approval for NALCO 7330 use in:

Industrial Cooling Tower Systems and Process Water Systems

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Industrial Recirculating Closed Loop Water Cooling Systems

Air Washer Systems and Brewery Pasteurizers

Pulp and paper mill influent water systems (but note this use is not currently authorized in California)

NALCO 7330 is registered for use in Canada. The federal legislative authority for the regulation of pesticides in Canada is the Pest Control Products Act. As with all biocides applied in Canada, the use of NALCO 7330 is subject to Federal regulation and regulation under provincial/territorial authority. The Pest Management Regulatory Agency (PMRA) administers the Pest Control Products Act (PCPA) for the federal Minister of Health.

Canadian PCPA Registration Number 17338 is approval for NALCO 7330 use in:

Industrial Recirculating Cooling Water Systems Industrial Process Water Systems.

This control product is to be used only in accordance with the directions on the product label. It is an offense under the *Pest Control Products Act* to use a control product under unsafe conditions.

Please refer to the product label (U.S. or Canadian) for specific directions of use (including initial dosage and subsequent dosages, and other detailed, product-specific information). Product labels can be accessed in the Nalco EH&S (Environmental Health and Safety) database.

MATERIALS OF COMPATIBILITY

Not Compatible
Aluminum
Brass
Carbon Steel
Neoprene
Nickel
Plasite 6000
Plasite 7122
Stainless Steel 304

DOSAGE AND FEEDING

NALCO 7330 should be fed via a closed feed system (a closed feed system being defined as a system in which fluid is moved from a closed storage vessel into a treated media without exposure to the atmosphere).

For complete dosage and feeding recommendations, consult your Nalco representative.

ENVIRONMENTAL AND TOXICITY DATA

Biological Oxygen Demand (5-day BOD,)	Not Available	
Chemical Oxygen Demand (COD)	20,000 ppm	
Total Organic Carbon (TOC)	7,850 ppm	

Refer to the product's Material Safety Data Sheet, for further information.

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SAFETY AND HANDLING

NALCO 7330 is a CORROSIVE MATERIAL that may cause allergic skin reactions. All precautions described in SECTION 4 of the Material Safety Data Sheet must be strictly followed when handling NALCO 7330.

STORAGE

The recommended in-plant storage limit for NALCO 7330 is six months.

REMARKS

If you need assistance or more information on this product, please call your nearest Nalco Representative. For more news about Nalco Company, visit our website at www.nalco.com.

For **Medical and Transportation Emergencies** Involving Nalco products, please see the Material Safety Data Sheet for the phone number.

ADDITIONAL INFORMATION

NALCO is a registered trademark of Ondeo Nalco Company (10-03)

Nalco Company, 1601 West Diehl Road, Naperville, Illinois 60563-1198

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PRODUCT

NALCO 7330

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

NALCO 7330

COMPANY IDENTIFICATION:

Nalco Energy Services, L.P.

P.O. Box 87

Sugar Land, Texas

77487-0087

EMERGENCY TELEPHONE NUMBER(S):

(800) 424-9300 (24 Hours)

CHEMTREC

NFPA 704M/HMIS RATING

HEALTH:

3/3 FLAMMABILITY:

0/0

INSTABILITY:

0/0

OTHER:

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

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)

5-Chloro-2-Methyl-4-Isothiazolin-3-one

CAS NO

% (w/w)

26172-55-4

1 - 5

2-Methyl-4-Isothiazolin-3-one

2682-20-4

0.1 - 1

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE OR SKIN BURNS. HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN. Do not get in eyes, on skin or on clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Mixers, loaders, and others exposed to this product must wear: long-sleeved shirt and long pants; chemical resistant gloves such as nitrile or butyl rubber; shoes plus socks; goggles and face shield; and chemical resistant apron. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product#s concentrate. Do not reuse them. Follow manufacturer#s instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly. Do not apply this product in a way that will contact workers or other persons. May evolve oxides of carbon (COx) under fire conditions. May evolve HCI under fire conditions. May evolve oxides of nitrogen (NOx) and sulfur (SOx) 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:

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.

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.

SYMPTOMS OF EXPOSURE:

Acute:

A review of available data does not identify any symptoms from exposure not previously mentioned.

Chronic:

A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS:

A review of available data does not identify any worsening of existing conditions.

4. FIRST AID MEASURES

IF IN EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told by a poison control center or doctor.

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or ambulances, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment 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.

FIRE FIGHTING MEASURES

FLASH POINT:

None

EXTINGUISHING MEDIA:

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



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FIRE AND EXPLOSION HAZARD:

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.

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: Dike and absorb with inert material (e.g. dry earth, sand), shovel all contaminated solids into a pail or drum and then treat with enough deactivation solution to wet the solids thoroughly. Let these containers stand open for 48 hours to prevent pressure build up and then seal for disposal. Equipment containing residues should be decontaminated before carrying out maIntenance or repair work or using for other service. Contaminated surfaces should be swabbed with deactivation solution, wait for the reaction to subside and rinse thoroughly with clean water. 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. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal Considerations).

ENVIRONMENTAL PRECAUTIONS:

This pesticide is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters, unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this pesticide only as specified on this label.

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.



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STORAGE CONDITIONS:

Store the containers tightly closed. Store separately from oxidizers. Store in suitable labelled containers.

SUITABLE CONSTRUCTION MATERIAL:

PVC, EPDM, Alfax, Teflon, HDPE (high density polyethylene), Polyethylene, Stainless Steel 304, Stainless Steel 316L, Hastelloy C-276, Plexiglass, Kalrez

UNSUITABLE CONSTRUCTION MATERIAL:

Copper, Mild steel, Polypropylene, Brass, Buna-N, Polyurethane, Hypaion, Viton, Neoprene, Aluminum, Ethylene propylene

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

This product contains the following component(s) with a recognised or recommended OEL value:

Manufacturer's Recommendation:

Substance(s)

5-Chloro-2-Methyl-4-

TWA: 0.076 mg/m3

Isothiazolin-3-one

STEL: 0.23 mg/m3

ENGINEERING MEASURES:

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

RESPIRATORY PROTECTION:

Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: Particulate filter - HEPA (Purple) 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:

Impervious gloves, PVC gloves, Neoprene gloves

SKIN PROTECTION:

Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. A full slicker suit is recommended if gross exposure is possible.

EYE PROTECTION:

Wear a face shield with chemical splash goggles.

HYGIENE RECOMMENDATIONS:

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.



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HUMAN EXPOSURE CHARACTERIZATION:

Based on our recommended product application and personal protective equipment, the potential human exposure is: Moderate

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Liquid

APPEARANCE

- Light green Light yellow

ODOR

Mild

SPECIFIC GRAVITY

1.026

DENSITY

8.5 lb/gal

SOLUBILITY IN WATER

Complete

pH (100 %)

3.0 - 5.0

FREEZING POINT

25 °F / -4 °C

VOC CONTENT

0.80 % EPA Method 24

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

11. TOXICOLOGICAL INFORMATION

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

ACUTE ORAL TOXICITY:

Species

LD50

Test Descriptor

Rat

3,810 mg/kg Rating: Non-Hazardous

Product

Naico Energy Services, L.P. P.O. Box 87 · Sugar Land, Texas 77487-0087 (281)263-7000

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ACUTE DERMAL TOXICITY:

Species

LD50

Rabbit > 5,000 mg/kg **Test Descriptor** Product

Rating: Non-Hazardous

ACUTE INHALATION TOXICITY:

Species Rat

LC50

13.7 mg/l (4 hrs)

Test Descriptor

1% Active Ingredient

Rating: Toxic

PRIMARY SKIN IRRITATION: A 1.5% active solution is corrosive to skin, a 0.6% active solution is a severe skin irritant, a 0.3% active solution is a moderate skin irritant and a 0.06% active solution is a non-irritant.

PRIMARY EYE IRRITATION: A 1.5% active solution is corrosive to the eyes, a 0.3% active solution is an eye irritant and 0.06% active solution is a non-irritant.

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 90day dermal study in rabbits of 0.4 mg/kg/day of isothiazolinone resulted in irritation but no pathological effects. A 30month 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).

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
Fathead Minnow	144 hrs	8 mg/l	Product
Rainbow Trout	96 hrs	12.67 mg/l	Product



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Inland Silverside	96 hrs	16.62 mg/l	_Product	
Bluegill Sunfish	144 hrs	0.54 mg/l	Active Substance	
Rainbow Trout	144 hrs	0.14 mg/l	Active Substance	
Sheepshead Minnow	96 hrs	0.3 mg/l	Active Substance	

Rating: Slightly toxic

ACUTE INVERTEBRATE RESULTS:

Species	Exposure	LC50	EC50	Test Descriptor
Mysid Shrimp (Mysidopsis bahia)	96.00 hrs	18.000 mg/l		Product
Ceriodaphnia dubia	48 hrs	15 mg/l	1	Product
Daphnia magna	48 hrs	8.7 - 12 mg/l		Product
Daphnia magna	48 hrs	0.13 mg/l		Active Substance
Blue Mussel	96 hrs	1.9 mg/l	1	Active Substance
Blue Mussel	48 hrs	14 mg/l		Active Substance
American Oyster	48 hrs	28 mg/l		Active Substance

Rating: Slightly toxic

AVIAN RESULTS:

Species	Exposure	LC50	Test Descriptor	
Bobwhite Quail		97.00000 mg/kg	Product	
Pekin Duck	8.00 Days	560.00000 mg/kg	Active Substance	
Bobwhite Quail	21 Days	85 mg/kg		
Bobwhite Quail	8 Days	560 mg/kg		

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.

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 - 50%	50 - 70%

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



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BIOACCUMULATION POTENTIAL

This preparation or material is not expected to bioaccumulate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

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

Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Moderate

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.

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 label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities. Plastic Containers: ^PLASTIC CONTAINERS: Do not reuse empty container. Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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):

ISOTHIAZOLINONE MICROBIOCIDE

UN/ID No :

UN 3265

Hazard Class - Primary :

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Packing Group:

II

Flash Point:

None

AIR TRANSPORT (ICAO/IATA):

Proper Shipping Name:

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical Name(s):

ISOTHIAZOLINONE MICROBIOCIDE

UN/ID No:

UN 3265



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Hazard Class - Primary:

Packing Group:

IATA Cargo Packing Instructions:

IATA Cargo Aircraft Limit:

8 11

812

30 L (Max net quantity per package)

MARINE TRANSPORT (IMDG/IMO):

Proper Shipping Name:

Technical Name(s):

Hazard Class - Primary: Packing Group:

UN/ID No :

ISOTHIAZOLINONE MICROBIOCIDE UN 3265

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

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15. REGULATORY 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.

5-Chloro-2-Methyl-4-Isothiazolin-3-one: Corrosive, Sensitizer

2-Methyl-4-Isothiazolin-3-one : Corrosive, Sensitizer

CERCLA/SUPERFUND, 40 CFR 117, 302:

Notification of spills of this product is not required.

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:

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.



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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) Magnesium Nitrate

CAS NO 10377-60-3 % (w/w) 1.0 - 5.0

TOXIC SUBSTANCES CONTROL ACT (TSCA):

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

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 176.170 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 176,180 Components of paper and paperboard in contact with dry foods, 21 CFR 176.300 - Slimicides

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

NSF Registration number for this product is: 062419

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 INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT (FIFRA):

EPA Reg. No. 1706-153

In all cases follow instructions on the product label.

This product has been certified as KOSHER/PAREVE for year-round use INCLUDING THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

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:

Citations	
Sec. 311	

CLEAN AIR ACT, Sec. 111 (40 CFR 60, Volatile Organic Compounds), Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances) : None of the substances are specifically listed in the regulation.

CALIFORNIA PROPOSITION 65:

This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

This product contains the following substances listed in the regulation:

Copper



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STATE RIGHT TO KNOW LAWS:

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

Copper

7440-50-8

Magnesium Nitrate

10377-60-3

NATIONAL REGULATIONS, CANADA:

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION:

Pesticide controlled products are not regulated under WHMIS.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

INTERNATIONAL CHEMICAL CONTROL LAWS

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS) and are listed on the Australian Inventory of Chemical Substances (AICS).

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 Ministry of International Trade & Industry List (MITI).

KOREA

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

THE PHILIPPINES

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

16. OTHER INFORMATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we have characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

* The human risk is: Moderate



PRODUCT

NALCO 7330

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

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

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

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight# CD-ROM Version), Ariel Research Corp., Bethesda, MD.

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.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight# CD-ROM Version), Ariel Research Corp., Bethesda, MD.

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.

Ariel Insight# (An integrated guide to industrial chemicals covered under major regulatory and advisory programs), North American Module, Western European Module, Chemical Inventories Module and the Generics Module (Ariel Insight# CD-ROM Version), Ariel Research Corp., Bethesda, MD.

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

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^{*} The environmental risk is: Moderate