

**MATERIAL SAFETY DATA SHEET**

PRODUCT

PAM ULTIMER

EMERGENCY TELEPHONE NUMBER

Australia: 1 800 033 111

New Zealand: 0 800 734 607

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : PAM ULTIMER

APPLICATION : SOIL CONDITIONER

COMPANY IDENTIFICATION :	Nalco Australia Pty Ltd 2 Anderson Street Banksmeadow N.S.W. 2019 Australia A.B.N. 41 000 424 788 TEL: +612 9316 3000 FAX: +612 9666 5292	Nalco New Zealand Ltd 44 Cryers Road East Tamaki, Auckland New Zealand TEL: +649 2745032 FAX: +649 2747924
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1 800 033111 (Australia) 0 800 734607 (New Zealand)

Date issued : 31-May-04

2. COMPOSITION/INFORMATION ON INGREDIENTS

Not classified as hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC).

CHEMICAL DESCRIPTION : Anionic copolymers, inorganic salt, water.

CHEMICAL NAME	CAS NO	% (w/w)
Ingredients determined not to be hazardous		-100

3. HAZARDS IDENTIFICATION

HUMAN HEALTH HAZARDS - ACUTE

EYE CONTACT

May cause irritation with prolonged contact.

SKIN CONTACT

May cause irritation with prolonged contact.

INGESTION

Not a likely route of exposure. May cause gastrointestinal irritation.

INHALATION

Not a likely route of exposure. No adverse effects expected.

HUMAN HEALTH HAZARDS - CHRONIC

No adverse effects expected other than those mentioned above.

4. FIRST AID MEASURES

EYE CONTACT

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Flush affected area with water. If symptoms develop, seek medical advice.

SKIN CONTACT

Remove contaminated clothing. Wash off affected area immediately with plenty of water. If symptoms develop, seek medical advice.

INGESTION

Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. If symptoms develop, seek medical advice. Contact the Poison's Information Centre (eg Australia 13 1126; New Zealand 0800 764 766).

INHALATION

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

NOTE TO PHYSICIAN

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

May evolve oxides of carbon (COx) 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

Notify appropriate government, occupational health and safety and environmental authorities. 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).

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:** Water in contact with the product will create a voluminous, slippery gel. Soak up as thoroughly as possible with inert absorbent material or sawdust. Do NOT hose down area until all possible traces of polymer are removed. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations). Use of alkaline absorbent materials will generate ammonia.

ENVIRONMENTAL PRECAUTIONS

Prevent material from entering sewers or waterways.

7. HANDLING AND STORAGE

HANDLING

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Do not take internally. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labelled. Avoid eye and skin contact.

STORAGE CONDITIONS

Store separately from oxidizers. Store the containers tightly closed. Protect product from freezing. Avoid extremes of temperature.

SUITABLE CONSTRUCTION MATERIAL

Polypropylene, Polyurethane, Polyethylene, Buna-N, Teflon, Vinyl.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

None of the components have been assigned an exposure standard by NOHSC (Australia) or OSH (New Zealand).

ENGINEERING MEASURES

General ventilation is recommended.

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

Respiratory protection is not normally needed.

HAND PROTECTION

Nitrile gloves, PVC gloves.

SKIN PROTECTION

Wear standard protective clothing.

EYE PROTECTION

Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS

Use good work and personal hygiene practices to avoid exposure. Consider the provision in the work area of a safety shower and eyewash. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
APPEARANCE	Milky white
ODOUR	None
FLASH POINT	Not flammable
SPECIFIC GRAVITY	1.19 - 1.22 @ 25 °C
SOLUBILITY IN WATER	Complete
pH (100%)	3.8 - 4.2

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VISCOSITY 300 - 1200 cPs @ 25 °C

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

Extremes of temperature, moisture.

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. Contact with strong alkalies (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS

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

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA

No toxicity studies have been conducted on this product.

SENSITIZATION

This product is not expected to be a sensitizer.

CARCINOGENICITY

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

HUMAN HAZARD CHARACTERIZATION

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

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS

The following results are for the product.

ACUTE INVERTEBRATE RESULTS

Species	Exposure	LC50	NOEC	LOEC	Test Descriptor
Ceriodaphnia dubia	48 hrs	295.5 mg/L	125 mg/L	250 mg/L	Product
Daphnia magna	48 hrs	1470.6 mg/L	1000 mg/L	2000 mg/L	Product

Rating : Slightly toxic

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SAFETY PHRASES:

S24/25 Avoid contact with skin and eyes.
S37/39 Wear suitable gloves and eye/face protection.

NICNAS :

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

NEW ZEALAND:

NZ SCHEDULE : Not Listed

INTERNATIONAL REGULATIONS:

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.

The following limitations apply:

Maximum dosage Limitation : 1.33 pounds per ton

INTERNATIONAL CHEMICAL CONTROL LAWS:

TOXIC SUBSTANCES CONTROL ACT (TSCA)

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

EUROPE

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

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.

16. OTHER INFORMATION

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

REFERENCES

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

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

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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(tm) 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(tm) 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(tm) CD-ROM Version), Micromedex, Inc., Englewood, CO.

Ariel Insight(tm) (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(tm) CD-ROM Version), Ariel Research Corp., Bethesda, MD.

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

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