

PROPER PH 7.5 POWDER

Chemwatch Material Safety Data Sheet
Issue Date: 3-Jan-2006

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

PROPER PH 7.5 POWDER

STATEMENT OF HAZARDOUS NATURE

**CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR
1910.1200.**

SUPPLIER

Company: Aquarium Pharmaceuticals Incorporated
Address:
PO Box 218
Chalfont
PA, 18914-0218
USA
Telephone: +1 215 822 8181
Emergency Tel: +1800 222 1222 (US Only)

Company: Aquarium Pharmaceuticals Incorporated
Address:
50 East Hamilton Street
Chalfont
PA, 18914
USA
Telephone: +1 215 822 8181

PRODUCT USE

Used according to manufacturers directions. For product 37.

SYNONYMS

Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
non hazardous ingredients, proprietary		>60
sodium thiosulfate	7772-98-7	1-5
EDTA tetrasodium salt	64-02-8	1-5
Aloes, extract	85507-69-3	<0.5

Section 3 - HAZARDS IDENTIFICATION

CANADIAN WHMIS SYMBOLS



EMERGENCY OVERVIEW

RISK

Cumulative effects may result following exposure*.

*(limited evidence)

continued...

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Section 3 - HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

The material has NOT been classified as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, unintentional ingestion is not thought to be cause for concern.

EYE

Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result. The material may produce foreign body irritation in certain individuals.

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

CHRONIC HEALTH EFFECTS

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Section 4 - FIRST AID MEASURES

SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

EYE

If this product comes in contact with eyes:

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Section 4 - FIRST AID MEASURES

- Wash out immediately with water.
- If irritation continues, seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

For exposures involving sulfides and hydrogen sulfide (including gastric acid decomposition products of alkaline sulfides).

- Hydrogen sulfide anion produces its major toxic effect through inhibition of cytochrome oxidases.
- Symptoms include profuse salivation, nausea, vomiting and diarrhea. Central nervous effects may include giddiness, headache, vertigo, amnesia, confusion and unconsciousness. Tachypnea, palpitation, tachycardia, arrhythmia, sweating, weakness and muscle cramps may also indicate over-exposures.

Treatment involves:

- If respirations are depressed, application of artificial respiration, administration of oxygen (continue after spontaneous breathing is established).
- For severe poisonings administer amyl nitrite and sodium nitrite (as for cyanide poisoning) but omit sodium thiosulfate injection.
- Atropine sulfate (0.6 mg intramuscularly) may contribute symptomatic relief.
- Conjunctivitis may be relieved by installation of 1 drop of olive-oil in each eye and sometimes by 3 drops of epinephrine solution (1:1000) at frequent intervals. Occasionally local anesthetics and hot and cold compresses are necessary to control pain.
- Antibiotics at first hint of pulmonary infection.
[Gosselin et al, Clinical Toxicology of Commercial Products].

Section 5 - FIRE FIGHTING MEASURES

Flash Point (F): Not Applicable

Lower Explosive Limit (%): Not Applicable

Upper Explosive Limit (%): Not Applicable

Autoignition Temp (F): Not Applicable

EXTINGUISHING MEDIA

- There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.
- Do not approach containers suspected to be hot.

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Section 5 - FIRE FIGHTING MEASURES

- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Non combustible.
 - Not considered to be a significant fire risk, however containers may burn.
- Decomposition may produce toxic fumes of, phosphorus oxides (PO_x), sulfur oxides (SO_x).
- May emit poisonous fumes.

FIRE INCOMPATIBILITY

None known.

PERSONAL PROTECTION

Glasses:
Chemical goggles.
Gloves:
PVC chemical resistant type.
Respirator:
Particulate

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves, safety glasses and dust respirator.
- Use dry clean up procedures and avoid generating dust.
- Sweep up, shovel up or vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
- Place spilled material in clean, dry, sealable, labeled container.

MAJOR SPILLS

- Moderate hazard.
- CAUTION: Advise personnel in area.
 - Alert Emergency Responders and tell them location and nature of hazard.
 - Control personal contact by wearing protective clothing.
 - Prevent, by any means available, spillage from entering drains or water courses.
 - Recover product wherever possible.
 - IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal.
 - ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.
 - If contamination of drains or waterways occurs, advise emergency services.

ACUTE EXPOSURE GUIDELINE LEVELS (AEG) (in ppm)

AEG 1: The airborne concentration of a substance above which it is predicted

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Section 6 - ACCIDENTAL RELEASE MEASURES

that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

AEGL 2: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL 3: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- DO NOT allow material to contact humans, exposed food or food utensils.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

RECOMMENDED STORAGE METHODS

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE REQUIREMENTS

Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

- No data available: sodium thiosulfate as (CAS: 7772-98-7)
No data available: EDTA tetrasodium salt as (CAS: 64-02-8) / (CAS: 10378-23-1) / (CAS: 13235-36-4)
No data available: Aloes, extract as (CAS: 85507-69-3) / (CAS: 94349-62-9)

No data for Proper pH 7.5 Powder.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENT DATA

SODIUM THIOSULFATE:

Dusts not otherwise classified, as inspirable dust;
ES TWA: 10 mg/m³.

For each of the following

EDTA TETRASODIUM SALT:

ALOES, EXTRACT:

Dusts not otherwise classified, as inspirable dust;
ES TWA: 10 mg/m³.

PERSONAL PROTECTION

EYE

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

HANDS/FEET

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids.

- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocautchouc
- polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

Wear chemical protective gloves, eg. PVC.

Wear safety footwear or safety gumboots, eg. Rubber.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

RESPIRATOR

Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
10 x PEL	P1 Air-line*	-	PAPR-P1
50 x PEL	Air-line**	P2	PAPR-P2
100 x PEL	-	P3 Air-line*	-
100+ x PEL	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

Explanation of Respirator Codes:

Class 1 low to medium absorption capacity filters.

Class 2 medium absorption capacity filters.

Class 3 high absorption capacity filters.

PAPR Powered Air Purifying Respirator (positive pressure) cartridge.

Type A for use against certain organic gases and vapors.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Type AX for use against low boiling point organic compounds (less than 65°C).

Type B for use against certain inorganic gases and other acid gases and vapors.

Type E for use against sulfur dioxide and other acid gases and vapors.

Type K for use against ammonia and organic ammonia derivatives

Class P1 intended for use against mechanically generated particulates of sizes most commonly encountered in industry, e.g. asbestos, silica.

Class P2 intended for use against both mechanically and thermally generated particulates, e.g. metal fume.

Class P3 intended for use against all particulates containing highly toxic materials, e.g. beryllium.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

ENGINEERING CONTROLS

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.

- If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered.

Such protection might consist of:

(a): particle dust respirators, if necessary, combined with an absorption cartridge;

(b): filter respirators with absorption cartridge or canister of the right type;

(c): fresh-air hoods or masks

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Mixes with water.

Molecular Weight: Not Applicable

Melting Range (C): Not Applicable

Solubility in water (g/L): Miscible

pH (1% solution): Not Applicable

Volatile Component (%vol): Not Applicable

Relative Vapor Density (air=1): Not Applicable

Lower Explosive Limit (%): Not Applicable

Autoignition Temp (C): Not Applicable

State: Divided Solid

Boiling Range (C): Not Applicable

Specific Gravity (water=1): Not Available

pH (as supplied): Not Applicable

Vapor Pressure (kPa): Not Applicable

Evaporation Rate: Not Applicable

Flash Point (C): Not Applicable

Upper Explosive Limit (%): Not Applicable

Decomposition Temp (°C): Not Available

APPEARANCE

White powder with a little odor; soluble in water.

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Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerization will not occur.

STORAGE INCOMPATIBILITY

None known.

Section 11 - TOXICOLOGICAL INFORMATION

Proper pH 7.5 Powder

Not available. Refer to individual constituents.

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

SODIUM THIOSULFATE:

TOXICITY

Oral (human) TDLo: 300 mg/kg/7d
[Hach]

IRRITATION

Nil Reported

EDTA TETRASODIUM SALT:

TOXICITY

Oral (rat) LD50: 2000-3200 mg/kg*
Eyes (rabbit): 1.9 mg
Eyes (rabbit):100 mg/24h-Moderate
*[BASF]

IRRITATION

Skin (rabbit):500 mg/24h-Moderate

ALOES, EXTRACT:

Aloe barbadensis Mill., extract

Intraperitoneal (mouse) LD50: 250 mg/kg

Nil reported

Section 12 - ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

Refer to data for ingredients, which follows:

EDTA TETRASODIUM SALT:

Not readily biodegradable. Harmful to aquatic organisms.

May cause long term adverse effects in the aquatic environment.

Toxicity to fish: LC50 (96h): >500 mg/l (Leuciscus idus)

Toxicity to daphnae (acute): EC50 (48h): >100 mg/l

Toxicity to algae EC50 (72h): 10-100 mg/l

COD Value: 570 mg O2/g

BOD5-Value: 20 mg O2/g

Toxicity to bacteria: 50 mg/l Warburg test

[ORICA]

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Section 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult Waste Management Authority for disposal.
- Bury residue in an authorized landfill.
- Recycle containers where possible, or dispose of in an authorized landfill.

Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN,IATA,IMDG

Section 15 - REGULATORY INFORMATION

RISK

None under normal operating conditions.

REGULATIONS

sodium thiosulfate (CAS: 7772-98-7) is found on the following regulatory lists;
Canada Domestic Substances List (DSL)
US Toxic Substances Control Act (TSCA)

EDTA tetrasodium salt (CAS: 64-02-8) is found on the following regulatory lists;
Canada Domestic Substances List (DSL)
US EPA High Production Volume Program Chemical List
US Toxic Substances Control Act (TSCA)

No regulations applicable

No data available for EDTA tetrasodium salt as CAS: 10378-23-1, CAS: 13235-36-4.
No data available for Aloes, extract as CAS: 85507-69-3, CAS: 94349-62-9.

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE

Cumulative effects may result following exposure*.

* (limited evidence).

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Section 16 - OTHER INFORMATION

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