

FUNGUS CURE CAPSULES

Chemwatch Material Safety Data Sheet
Issue Date: 5-Jan-2006

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

FUNGUS CURE CAPSULES

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 products 16A and 16B.

SYNONYMS

Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
alpha-lactose	63-42-3	>90
acriflavine	8048-52-0	1-5
C.I. Basic Green 4 (hydrochloride)	569-64-2	<0.5

Section 3 - HAZARDS IDENTIFICATION

CANADIAN WHMIS SYMBOLS



EMERGENCY OVERVIEW

RISK

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

Exposure may produce irreversible effects*.

*(limited evidence)

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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 produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

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

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

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:
- 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.

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Section 4 - FIRST AID MEASURES

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

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

Flash Point (F): Not Applicable

Lower Explosive Limit (%): Not Available

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.
- 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, carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.
May emit poisonous fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

PVC chemical resistant type.

Respirator:

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Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Clean up all spills immediately.
- Secure load if safe to do so.
- Bundle/collect recoverable product.
- Collect remaining material in containers with covers for disposal.

MAJOR SPILLS

- Clean up all spills immediately.
- Wear protective clothing, safety glasses, dust mask, gloves.
- Secure load if safe to do so. Bundle/collect recoverable product.
- Use dry clean up procedures and avoid generating dust.
- Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
- Water may be used to prevent dusting.
- Collect remaining material in containers with covers for disposal.
- Flush spill area with water.

ACUTE EXPOSURE GUIDELINE LEVELS (AEGL) (in ppm)

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

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Section 7 - HANDLING AND STORAGE

- 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.
- Packing as recommended by manufacturer
- Check all containers are clearly labeled and free from leaks.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

No data available: alpha-lactose as (CAS: 63-42-3) / (CAS: 5989-81-1) / (CAS: 14641-93-1) / (CAS: 64044-51-5) / (C

No data available: acriflavine as (CAS: 8048-52-0)

No data available: C.I. Basic Green 4 (hydrochloride) as (CAS: 569-64-2)

No data for Fungus Cure Capsules.

INGREDIENT DATA

ALPHA-LACTOSE:

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m³.

For each of the following

ACRIFLAVINE:

C.I. BASIC GREEN 4 (HYDROCHLORIDE):

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m³.

Particulate (insoluble or poorly soluble *) Not Otherwise Specified (P.N.O.C)

TLV TWA: 10 mg/m³ Inhalable particulate

TLV TWA: 3 mg/m³ Respirable particulate

OEL-Sweden, United Kingdom: 10 mg/m³ total dust, 5 mg/m³ respirable dust

These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:

- the architecture of the air spaces remain intact,
- scar tissue (collagen) is not synthesised to any degree,
- tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- seriously reduce visibility,
- cause unpleasant deposits in the eyes, ears and nasal passages,
- contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

- to brief exposures to higher concentrations
- nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- are insoluble or poorly soluble* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload)

* Notice of intended change.

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

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.

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

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear an approved respirator. Correct fit is essential to

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

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 Available

Autoignition Temp (C): Not Applicable

State: Manufactured

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

Reddish brown capsule containing flowable pale green/brown powder with no odor; soluble in water.

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

Product is considered stable and hazardous polymerization will not occur.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidizing agents.

Section 11 - TOXICOLOGICAL INFORMATION

Fungus Cure Capsules

Not available. Refer to individual constituents.

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

ALPHA-LACTOSE:

TOXICITY

Oral (rat) LD50: >10000 mg/kg

Equivocal tumorigenic agent by RTECS criteria.

IRRITATION

Nil Reported

ACRIFLAVINE:

No significant acute toxicological data identified in literature search.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

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Section 11 - TOXICOLOGICAL INFORMATION

C.I. BASIC GREEN 4 (HYDROCHLORIDE):

TOXICITY

Oral (rat) LD50: 560 mg/kg

Eye (rabbit) - SEVERE

[BASF]

IRRITATION

Skin (rabbit) - non-irritating

Section 12 - ECOLOGICAL INFORMATION

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

Refer to data for ingredients, which follows:

C.I. BASIC GREEN 4 (HYDROCHLORIDE):

Half-life Soil - High (hours): 4320

Half-life Soil - Low (hours): 672

Half-life Air - High (hours): 0.265

Half-life Air - Low (hours): 0.0389

Half-life Surface water - High (hours): 4320

Half-life Surface water - Low (hours): 672

Half-life Ground water - High (hours): 8640

Half-life Ground water - Low (hours): 1344

Aqueous biodegradation - Aerobic - High (hours): 4320

Aqueous biodegradation - Aerobic - Low (hours): 672

Aqueous biodegradation - Anaerobic - High (hours): 17280

Aqueous biodegradation - Anaerobic - Low (hours): 2688

Photooxidation half-life air - High (hours): 0.265

Photooxidation half-life air - Low (hours): 0.0389

The material is classified as an ecotoxin* because the Fish LC50 (96 hours) is less than or equal to 0.1 mg/l

* Classification of Substances as Ecotoxic (Dangerous to the Environment)

Appendix 8, Table 1

Compiler's Guide for the Preparation of International Chemical Safety Cards:

1993 Commission of the European Communities.

for product of similar composition

Biological Elimination above 80% (Zahn-Wellens test)

COD 850 mg/g~

Ecotoxicology:

Fish LC0 (96 h) Brachydanio rerio 0.1-1.0 mg/l

Inhibition of waste water bacteria:

50% inhibitory effect: 1-10 mg/l

Test procedure: Respiratory inhibition of activated sludge organisms according to D. Brown et al., Chemosphere, 10(3),245-261 (1981) and conforming to OECD Guideline 209

Water pollution class (WGK): 3 - high impairment of water quality

WGK: Classification in accordance with German Water Resources Act.

Product does not add to AOX-value of the sewage (DIN 38409)

Product does not contain heavy metals in concentrations of concern for waste water.

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Section 12 - ECOLOGICAL INFORMATION

Product does not release nitrogen which can contribute to eutrophication

Does not contain phosphates or organophosphorus compounds.

Cationic substances, and their polymers and those polymers that are reasonably anticipated to become cationic in the natural aquatic environment (pH range 4-9) may be environmental hazards.

Exempt from this concern are those polymers to be used only in solid phase, such as ion-exchange resins, and where the FGEW (Functional Group Equivalent Weight) of cationic groups is not 5000 and above.

Cationic groups such as alkylsulfoniums, alkylphosphoniums and quaternary ammonium polymers are highly toxic to fish and other aquatic organisms. Similarly potentially cationic groups such as amines and isocyanates are of concern. Some cationics, however, may fall into the category of PLCs (polymers of low concern) provided they possess low charge density, and/or are not water-soluble or are not self-dispersing polycarboxylates or poly- (aromatic or aliphatic) sulfonate polymers.

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 or incinerate residue at an approved site.
- Recycle containers if 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

Risk Codes
R52/53

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

REGULATIONS

US EPCRA Section 313 Chemical List For Reporting Year 2004

Ingredient	CAS	% de minimus concentration
C.I. Basic Green 4 (hydrochloride)	569-64-2	1.0
alpha-lactose (CAS: 63-42-3) is found on the following regulatory lists; Canada Domestic Substances List (DSL) US Toxic Substances Control Act (TSCA)		
alpha-lactose (CAS: 5989-81-1) is found on the following regulatory lists; Canada Domestic Substances List (DSL) US Toxic Substances Control Act (TSCA)		

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Section 15 - REGULATORY INFORMATION

alpha-lactose (CAS: 14641-93-1) is found on the following regulatory lists;

Canada Domestic Substances List (DSL)

US Toxic Substances Control Act (TSCA)

alpha-lactose (CAS: 64044-51-5) is found on the following regulatory lists;

Canada Domestic Substances List (DSL)

US Toxic Substances Control Act (TSCA)

alpha-lactose (CAS: 10039-26-6) is found on the following regulatory lists;

Canada Domestic Substances List (DSL)

US Toxic Substances Control Act (TSCA)

No regulations applicable

C.I. Basic Green 4 (hydrochloride) (CAS: 569-64-2) is found on the following regulatory lists;

Canada Domestic Substances List (DSL)

Canada Ingredient Disclosure List (SOR/88-64)

US EPCRA Section 313 Chemical List For Reporting Year 2004

US Toxic Substances Control Act (TSCA)

No data available for acriflavine as CAS: 8048-52-0.

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE

Limited evidence of a carcinogenic effect*.

* (limited evidence).

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Issue Date: 5-Jan-2006

Print Date: 5-Jan-2006

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