

# LIQUID FUNGUS CURE

Chemwatch Material Safety Data Sheet  
Mar-3-2008  
NB293ECP

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

LIQUID FUNGUS CURE

### STATEMENT OF HAZARDOUS NATURE

Not considered a hazardous substance according to OSHA 29 CFR 1910.1200.

### SUPPLIER

Company: Mars Fishcare North America Inc  
Address:  
PO Box 218  
Chalfont  
PA, 18914- 0218  
USA  
Telephone: +1 215 822 8181  
Emergency Tel: +1800 222 1222 (US Only)

Company: Mars Fishcare North America Inc  
Address:  
50 East Hamilton Street  
Chalfont  
PA, 18914  
USA  
Telephone: +1 215 822 8181  
Fax: +1 215 822 1906

### PRODUCT USE

Used according to manufacturer' s directions. For product 13.

### SYNONYMS

"Solution ID# 3310"

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## Section 2 - HAZARDS IDENTIFICATION

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### CANADIAN WHMIS SYMBOLS

None

### EMERGENCY OVERVIEW

#### RISK

### 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 liquid 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).

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Section 2 - HAZARDS IDENTIFICATION

## 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.

## 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 the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
acriflavine	8048-52-0	0.4

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## 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.

### 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.

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## 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

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Section 5 - FIRE FIGHTING MEASURES

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## EXTINGUISHING MEDIA

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

## FIRE FIGHTING

- Use water delivered as a fine spray to control fire and cool adjacent 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.

## FIRE INCOMPATIBILITY

None known.

## PERSONAL PROTECTION

Glasses:

DB section unexpectedly missing - Please call Chemwatch.

Gloves:

DB section unexpectedly missing - Please call Chemwatch.

Respirator:

DB section unexpectedly missing - Please call Chemwatch.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapors and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labeled container for waste disposal.

### MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Emergency Responders and tell them location and nature of hazard.
- Control personal contact by using protective equipment.
- Prevent spillage from entering drains, sewers or water courses.
- Recover product wherever possible.
- Put residues in labeled containers for disposal.
- If contamination of drains or waterways occurs, advise emergency services.

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.

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Section 7 - HANDLING AND STORAGE

- 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.
- 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.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

Source	Material	TWA mg/m <sup>3</sup>	STEL mg/m <sup>3</sup>
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	acriflavine (Respirable size+)	3	6
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	acriflavine (Particulates, NOC++)	10	20
US - Michigan Exposure Limits for Air Contaminants	acriflavine (Particulates not otherwise regulated, Respirable dust)	5	

### MATERIAL DATA

Not available. Refer to individual constituents.

### INGREDIENT DATA

#### ACRIFLAVINE:

It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum.

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

### 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 general protective gloves, e.g.. light weight rubber gloves.

#### OTHER

No special equipment needed when handling small quantities.

#### OTHERWISE:

- Overalls.
- Barrier cream.
- Eyewash 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 obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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### PHYSICAL PROPERTIES

DB section unexpectedly missing - Please call Chemwatch.

Molecular Weight: Not Applicable

Melting Range (°F): Not Available

Solubility in water (g/L): Miscible

pH (1% solution): Not Available

Volatile Component (%vol): Not Available

Relative Vapor Density (air=1): Not

Available

Lower Explosive Limit (%): Not Applicable

Autoignition Temp (°F): Not Applicable

State: Liquid

Boiling Range (°F): Not Available

Specific Gravity (water= 1): 1.0

pH (as supplied): 4- 8

Vapour Pressure (mmHG): Not Available

Evaporation Rate: Not Available

Flash Point (°F): Not Applicable

Upper Explosive Limit (%): Not Applicable

Decomposition Temp (°F): Not Available

Viscosity: Not Available

### APPEARANCE

Orange-red liquid with a slight odour; mixes with water.

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## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

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### CONDITIONS CONTRIBUTING TO INSTABILITY

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

### STORAGE INCOMPATIBILITY

Avoid contamination of water, foodstuffs, feed or seed.  
None known.

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## Section 11 - TOXICOLOGICAL INFORMATION

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### Liquid Fungus Cure

#### TOXICITY AND IRRITATION

Not available. Refer to individual constituents.

#### ACRIFLAVINE:

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

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 12 - ECOLOGICAL INFORMATION

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No data for Liquid Fungus Cure.  
Refer to data for ingredients, which follows:

### ACRIFLAVINE:

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.

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.

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## Section 13 - DISPOSAL CONSIDERATIONS

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### Disposal Instructions

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

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: Burial in a licensed land-fill or Incineration in a licensed apparatus (after admixture with suitable combustible material)
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

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## Section 14 - TRANSPORTATION INFORMATION

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

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## Section 15 - REGULATORY INFORMATION

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### REGULATIONS

Liquid Fungus Cure (CAS: None):  
No regulations applicable

acriflavine (CAS: 8048-52-0) is found on the following regulatory lists;  
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits  
US - Michigan Exposure Limits for Air Contaminants  
US - North Carolina Permissible Exposure Limits (PELs) for Air Contaminants  
US OSHA Permissible Exposure Levels (PELs) - Table Z3

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## Section 16 - OTHER INFORMATION

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Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following U.S.

Regulations and Standards:

OSHA Standards - 29 CFR:

1910.132 - Personal Protective Equipment - General requirements

1910.133 - Eye and face protection

1910.134 - Respiratory Protection

1910.136 - Occupational foot protection

1910.138 - Hand Protection

Eye and face protection - ANSI Z87.1

Foot protection - ANSI Z41

Respirators must be NIOSH approved.

For detailed advice on Personal Protective Equipment, refer to the following Canadian Standards:

CAN/CSA-Z195 - Protective Footwear

Z195.1 - Guideline on Selection, Use, and Care of Protective Footwear

CAN/CSA-Z94.3 - Industrial Eye and Face Protectors

Z94.3.1 - Protective Eyewear User's Guide

CSA-Z94.4 - Selection, Use, and Care of Respirators

CAN/CSA-Z180.1 - Compressed Breathing Air and Systems.

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