



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 08/29/2008
Date Updated: 02/21/2006
Version 1.70

Section 1 - Product and Company Information

Product Name AMPHOTERICIN B FROM STREPTOMYCES SSP., FOR CELL BIOLOGY
Product Number 10041
Brand Fluka Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
AMPHOTERICIN B	1397-89-3	No	215-742-2	

Formula C47H73NO17
Synonyms Abelcet, AmBisome, Ampho-moronal, Amphotericine B, Amphozone, Fungilin, Fungizone, Mystecilin-F, NS 718, NSC 527017

Section 3 - Hazards Identification

Emergency Overview

Irritant.
Irritating to eyes, respiratory system and skin.
Target organ(s): Kidneys.

HMS Rating
Health: 2* Flammability: 0 Reactivity: 0

NFPA Rating
Health: 2 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media Suitable

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep tightly closed. Store at 2-8°C

Special Requirements

Light and moisture sensitive.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance
Physical State
Solid

Molecular Weight 924.1 AMU

pH N/A
BP/BP Range N/A
MP/MP Range N/A
Freezing Point N/A
Vapor Pressure N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
SG/Density N/A
Bulk Density N/A
Odor Threshold N/A
Volatile% N/A
VOC Content N/A
Water Content N/A
Solvent Content N/A
Evaporation Rate N/A
Viscosity N/A
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point °F N/A
Flash Point °C N/A

Explosion Limits N/A

Flammability N/A
Autoignition Temp N/A
Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.

Conditions to Avoid
Exposure to light may affect product quality. Exposure to moisture may affect product quality.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, carbon dioxide, and nitrogen oxides

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
Causes skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
Causes eye irritation.
Inhalation
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion
May be harmful if swallowed.

Sensitization
Sensitization
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Target Organ(s) or System(s)
Kidneys.

Signs and Symptoms of Exposure
Exposure can cause: Nausea, headache, and vomiting. Convulsions. Chills, fever, malaise, muscle and joint pain, rash, anorexia, diarrhea, gastrointestinal cramps, hypertension, hypotension, cardiac arrhythmias, ventricular fibrillation, cardiac arrest, blurred vision, tinnitus, vertigo, anaemia and hypokalemia.

RTECS Number: BU2625000

Toxicity Data

Intravenous - Woman: 22 MG/KG (LDLO)
Remarks: Blood: Leukopenia.

Intravenous - Man: 164 UG/KG (LDLO)
Remarks: Cardiac: Other changes.

Oral - Rat: > 5000 mg/kg (LD50)

Intraperitoneal - Rat: >5 GM/KG (LD50)

Intravenous - Rat: 1600 UG/KG (LD50)

Intramuscular - Rat: >5 GM/KG (LD50)

Intraperitoneal - Mouse: 27740 UG/KG (LD50)

Intravenous - Mouse: 1200 UG/KG (LD50)

Intramuscular - Mouse: >5 GM/KG (LD50)

Intravenous - Dog: 6 MG/KG (LD50)
Remarks: Kidney, Ureter, Bladder: Other changes.

Chronic Exposure - Teratogen

Species	Dose	Route of Application	Exposure Time
Rat	5500 UG/KG	Intravenous	(6-16D PREG)

Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Chronic Exposure- Mutagen

<u>Species</u>	<u>Dose</u>	<u>Cell Type</u>	<u>Mutation test</u>
Human	100 MG/L	Other cell types	Other mutation test systems
Human	10 UMOL/L	lymphocyte	DNA inhibition
Hamster	50 MG/L	lung	DNA inhibition
Hamster	50 MG/L	lung	Other mutation test systems
Rabbit	20 MG/KG	Intravenous	11D sperm

Chronic Exposure- Reproductive Hazard

<u>Species</u>	<u>Dose</u>	<u>Route of Application</u>	<u>Exposure Time</u>
Dog	600 MG/KG	Oral	(30D MALE)
Result: Paternal Effects: Prostate, seminal vesicle, Cowper's gland, accessory glands.			
Rabbit	20 MG/KG	Intravenous	(10D MALE)
Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).			

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations**Appropriate Method of Disposal of Substance or Preparation**

Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information**DOT**

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be nonhazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information**EU Additional Classification**

Symbol of Danger: Xi

Indication of Danger:

Irritant.

Risk Statements R: 36/37/38

Irritating to eyes, respiratory system and skin.

Safety Statements S: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Classification and Label Text

Indication of Danger:

Irritant.

Risk Statements

Irritating to eyes, respiratory system and skin.

Safety Statements

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Statements

Target organ(s): Kidneys.

United States Regulatory Information

SARA Listed: No

Canada Regulatory information**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information**Disclaimer**

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SigmaAldrich Inc., shall not be held liable for any damage resulting from handling or form contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.