

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Catalog #: 10217, 10217-1
Product Name: Bialaphos
CAS-No.: 71048-99-2

Company Identification

Cepham Life Sciences Inc.
11830 W Market Place, Suite K
Fulton, MD 20759
USA
Toll Free: 1-800-257-1565
Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

Classification of the substance or mixture

Acute Toxicity, oral (Category 3)
Acute Toxicity, dermal (Category 5)
Acute Toxicity, inhalation (Category 5)
Reproductive toxicity (Category 2)
Specific Target Organ Systematic Toxicity – Single Exposure (Category 1)

Hazards not otherwise classified (HNOC) or not covered by GHS – none

SECTION 3: Composition / Information on Ingredients

Substances

Formula: C₁₁H₂₁N₃NaO₆P
Molecular Weight: 345.27 g/mol
CAS-No.: 71048-99-2

GHS Label elements, including precautionary statements



GHS Label

Danger!

Hazard Statements

H301: Toxic if swallowed
H313 + H333: Maybe harmful in contact with skin or if inhaled
H361: Suspected of damaging fertility or the unborn child
H370: Causes damage to organs

Precautionary Statements

P260: Do not breathe dust/fumes/gas/mist/vapors/spray
P264: Wash skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P301 + P310: If SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P330:	Rinse mouth
P302 + P315:	IF ON SKIN: Wash with plenty of water and soap
P304 + P312:	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P308 + P313:	IF exposed or concerned: Call a POISON CENTER or doctor/physician
P321:	Specific treatment (see First Aid Measures on this label)
P405:	Store locked up
P501:	Dispose of contents/container in accordance with local/regional/national/international Regulations

Potential Health Effects

Eye	Causes severe eye irritation and burns.
Skin	Cause severe skin irritation.
Ingestion	May be fatal if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation	May cause severe irritation of the respiratory tract with sore throat, burns, coughing, shortness of breath and delayed lung edema.

SECTION 4: First Aid Measures

Description of first aid measures

If inhaled

Remove to fresh air. Consult a physician.

In case of skin contact

Immediately wash skin with water. Consult a physician.

In case of eye contact

Immediately rinse out with water for > 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

If swallowed

Do not induce vomiting. Wash out mouth with water. Drink plenty of water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x), Sulphur oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Evacuate and ventilate the area. Wear respirator and protective clothing. Avoid dust formation. Avoid breathing vapor, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling & Storage

Precautions for safe handling

Avoid contact with skin, eyes, and clothing. Avoid prolonged, repeated exposure. Handle material with suitable protection. The material is hygroscopic.

Conditions for safe storage, including any incompatibilities

Store tightly in a closed container, desiccate at -20° C. Moisture sensitive. Protect from light.

Specific end use(s)

Apart from the users mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal Protective Equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	Form: Powder
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	Soluble
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available

t) Oxidizing properties

No data available

Other safety information

no data available

SECTION 10: Stability & Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Incompatible materials, sunlight, heat, moisture

Incompatible materials

Water, strong oxidizing agents, acids and solvents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions- carbon oxides, nitrogen oxides, sulphur oxides, phosphur oxides, sodium oxides.

In the event of fire: see section 5

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Oral: LD50 (Rat) = 268 mg/kg

Oral: LD50 (Mouse) = 372 mg/kg

Dermal: LD50 (Rat) = 3000 mg/kg

Inhalation: LD50 (Rat) = 2570 mg/m³

Skin corrosion/irritation

May cause skin irritation

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Possible allergic reaction to dust if inhaled, ingested, or in contact with skin.

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

TDLo (oral, rat): 1100mg/kg; (female 7–17D peg) (RTECS)

Specific target organ toxicity - single exposure

Cause damage to organs (central nervous system) Inertia, salivation, clonic convulsions and increased irritability to outside stimuli in a rat acute oral administration test.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Bio-accumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

SECTION 13: Disposal Considerations

Waste treatment methods

Product

Disposal should be handled by an approved waste disposal facility.

Contaminated packaging

Dispose of as unused product

SECTION 14: Transport Information

DOT (US)

UN Number: 3464

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s. (Bialaphos Sodium Salt)

Class: Toxic Substances. (Division 6.1)

Packing Group: III

Marine Pollutant: No

IATA

UN Number: 3464

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s. (Bialaphos Sodium Salt)

Class: Toxic Substances. (Division 6.1)

Packing Group: III

Marine Pollutant: No

SECTION 15: Regulatory Information

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazards

Massachusetts Right To Know Components

Phosphinothricylalanylalanine sodium

Cas-No. 71048-99-2

Pennsylvania Right To Know Components

Phosphinothricylalanylalanine sodium

Cas-No. 71048-99-2

New Jersey Right To Know Components

Phosphinothricylalanylalanine sodium

Cas-No. 71048-99-2

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other Information

HMIS Rating

Health hazard:	0
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.