DALYNN BIOLOGICALS

SAFETY DATA SHEET Version 1.6 Revision Date 01/14/2024

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Name: | Listeria Supplement (Oxford) |
|--|---|
| Catalog Number: | LL70 |
| Product Use: | For laboratory use only |
| Manufacturer's Name: Supplier's Name: Address: | Dalynn Biologicals Inc. Dalynn Biologicals Inc. 3253 – 34 Avenue NE Calgary, AB, Canada T1Y 6X2 |
| Telephone: | 1-888-404-4045 |
| Fax: | (403) 250-9010 |
| Chemical Emergency: Phone Number Only | 1-613-996-6666 |

2. HAZARD IDENTIFICATION

Emergency Overview

GHS Classification

Acute toxicity, Oral (Category 1) Skin corrosion/irritation (Category 2) Germ cell mutagenicity (Category 2) Reproductive toxicity (Category 1B) Acute aquatic toxicity (Category 2) Chronic aquatic toxicity (Category 2)

GHS Label Elements, Including Precautionary Statements

Pictogram



Signal word

Hazard statement(s)

| H300 | Fatal if swallowed. |
|------|---|
| H315 | Causes skin irritation. |
| H341 | Suspected of causing genetic defects. |
| H360 | May damage fertility or the unborn child |
| H411 | Toxic to aquatic life with long lasting effects |

Precautionary statement(s)

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood
- P264 Wash skin thoroughly after handling
- P270 Do not eat, drink, or smoke when using this product.

| P273 | Avoid release to the environment |
|----------------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P301+P310+P330 | If swallowed: Immediately call a poison center or doctor. Rinse mouth. |
| P302+P352 | If on skin: Wash with plenty of water. |
| P308+P313 | If exposed or concerned: Get medical advice / attention. |
| P332+P313 | If skin irritation occurs: Get medical advice / attention. |
| P391 | Collect spillage. |
| P501 | Dispose of contents / container to an approved waste disposal plant |

3. COMPOSITION & INFORMATION ON INGREDIENTS

| INGREDIENT | % | CAS-No. | EC-No. | Index-No. |
|---------------------------|------|------------|-----------|--------------|
| Cycloheximide | 91.5 | 66-81-9 | 200-636-0 | 613-140-00-8 |
| Colisitin sulfate | 4.6 | 1264-72-8 | 215-034-3 | - |
| Phosphomycin disodium | 2.2 | 26016-99-9 | 247-409-2 | - |
| Acriflavine hydrochloride | 1.1 | 8063-24-9 | - | - |
| Cefotetan | 0.5 | 69712-56-7 | 274-093-3 | - |

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. The main component and primary danger associated with this product is exposure to the chemical, cycloheximide.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash affected area with soap and plenty of water. Take patient to hospital and consult a physician.

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes. Take patient to hospital and consult a physician.

In swallowed

Rinse mouth with water if patient is conscious. Take patient to hospital and consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions: carbon dioxides, nitrogen Oxides, sulfur oxides.

Explosion data – sensitivity to mechanical impact No.

Explosion data – sensitivity to static discharge No.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing in dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Wearing appropriate safety gear including chemical resistant gloves and dust mask or respirator. Sweep up carefully minimizing dust creation. Place in sealed container and hold for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use in area with adequate ventilation, provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Store at refrigerated conditions at 4 to 8°C away from direct light or sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Use in area with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN143) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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 after use.

Eye protection

Face shield and/or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Skin and body protection

Wear appropriate clothing such as a lab coat that covers as much of the body as possible. Complete suit can also be worn if desired.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

| | Form | Powder | - |
|-------|---|----------|-------------------|
| | Color | Light ye | ellow |
| Safet | y data pH | | No data available |
| | Melting point/ freezing point | | No data available |
| | Boiling point | | No data available |
| | Flash point | | No data available |
| | Ignition temperature | | No data available |
| | Auto ignition temperatur | re | No data available |
| | Lower explosion limit | | No data available |
| | Upper explosion limit | | No data available |
| | Vapor pressure | | No data available |
| | Density | | No data available |
| | Water solubility | | No data available |
| | Partition coefficient/ n-octanol/water | | No data available |
| | Relative vapor density | | No data available |
| | Odour | | No data available |
| | Odour threshold | | No data available |
| | Evaporation rate | | No data available |

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions No data available.

Chemical stability

No data available.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Other decomposition products – No data available Hazardous decomposition products formed under fire conditions – Carbon oxides, Nitrogen Oxides, sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 LD50 Oral – Rat 2 mg/kg (cycloheximide) LD50 Oral – Rat 1,048 mg/kg (acriflavine) LD50 Oral – Mus 793 mg/kg (colistin sulfate)

Inhalation LC50

No data available (all components)

Other information on acute toxicity

No data available (all components)

Skin corrosion/irritation

Skin – Rabbit – Skin irritation – 24h (cycloheximide)

Serious eye damage/eye irritation

No data available (cycloheximide)

Respiratory or skin sensitization

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

Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects (cycloheximide). In vitro tests showed mutagenic effects (cycloheximide).

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.

Reproductive toxicity

No data available

Teratogenicity

May cause congenital malformation in the fetus (cycloheximide). Presumed human reproductive toxicant (cycloheximide).

Specific target organ toxicity – single exposure (GHS)

No data available

Specific target organ toxicity - repeated exposure (GHS)

No data available

Aspiration hazard

No data available

Potential health effects

| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation. |
|------------|--|
| Ingestion | May be fatal if swallowed. |
| Skin | May be harmful if absorbed through skin. Causes skin irritation. Contains several antimicrobials that may cause allergic or hypersensitivity reactions in sensitive individuals. |
| Eye | Causes eye irritation. |

Signs and Symptoms of Exposure

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

Synergistic effects

No data available

Additional information

RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil No data available

PBT and vPvB assessment

No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN Number: 2811 Class: 6.1 Packing Group: I Proper Shipping Name: Toxic solid, organic, N.O.S. (cycloheximide) Marine Pollutant: No Poison Inhalation Hazard: No

IMDG

UN Number: 2811 Class: 6.1 Packing Group: I EMS-No: F-A, S-A Proper Shipping Name: Toxic solid, organic, N.O.S. (cycloheximide) Marine Pollutant: No

IATA

UN Number: 2811 Class: 6.1 Packing Group: I Proper Shipping Name: Toxic solid, organic, N.O.S. (cycloheximide)

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by them.

16. OTHER INFORMATION

Further information

Copyright 2018 Dalynn Biologicals Inc. The above information is believed to be correct but does not purport to be all inclusive and shall be only used 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. Dalynn Biologicals Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.