



# Material Safety Data Sheet

## Section 1 - Product and Company Information

**Product Name:** Actero™ Palcam Supplement  
**Catalog Number:** FCM-213 Actero™ Oxford Listeria Supplement 10X 5ml

**Manufacturer:** Dalynn Biologicals Inc.  
**Address:** 3253 – 34 Avenue N.E.  
Calgary, Alberta, Canada, T1Y 6X2

**Phone:** (403) 263-6357  
(877) 298-0208

## Section 2 - Composition / Information on Ingredients

**Chemical Characterization:**

**Description:** This product is a mixture of the substances listed below along with nonhazardous additions. Any other hazardous ingredients within the product not listed below, are at concentrations lower than the regulatory threshold limits specified by 29 CFR 1910.1200.

CAS #	Hazardous Ingredients
1264-72-8	Colistin Sulfate
8063-24-9	Acriflavine Hydrochloride
74356-00-6	Cefotetan
26016-99-9	Phosphomycin Disodium
66-81-9	Cycloheximide

## Section 3 - Hazards Identification

**Hazard Overview:** Causes irritation in case of eye contact, ingestion or inhalation. May cause skin irritation.



**NFPA Rating**

Health - 1  
Fire - 0  
Reactivity - 0

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## Section 4 - First Aid Measures

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<b>General Advice:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>Inhalation:</b>	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. If conscious wash mouth out repeatedly with water. Consult a physician.
<b>Skin Contact:</b>	Wash off with soap and plenty of water for at least 15 minutes. Consult a physician.
<b>Eye Contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.

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## Section 5 - Fire Fighting Measures

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<b>Suitable Extinguishing Media:</b>	Use water spray, carbon dioxide, dry chemical powder or alcohol resistant foam.
<b>Protective Equipment:</b>	Wear protective clothing and self-contained breathing apparatus for firefighting if necessary.

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## Section 6 - Accidental Release Measures

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<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation or breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
<b>Methods for Clean Up:</b>	Pick up and arrange disposal without crating dust. Wipe up with a damp sponge and transfer to suitable closed containers for disposal.

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## Section 7 - Handling and Storage

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<b>Safe Handling:</b>	Avoid contact with skin or eyes. Avoid formation of dust or aerosols. Provide appropriate exhaust ventilation at locations where dust is formed.
<b>Storage:</b>	Keep container tightly closed in a cool dry place in accordance with specified storage conditions.



## Section 8 - Exposure Controls and Personal Protection Equipment

### Personal protective equipment

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

#### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

## Section 9 - Physical and Chemical Properties

### Appearance

**Physical State:**

Solid

**Color:**

Yellowish Orange Crystalline Powder

### Safety Data

**pH:**

No data available

**Boiling Point:**

No data available

**Melting Point:**

No data available

**Flash Point:**

No data available

**Ignition Temperature**

No data available

**Auto igniting Temp:**

No data available

**Explosion Limits:**

No data available

**Vapor Pressure:**

No data available

**Density:**

No data available

**Odor**

No data available

**Solubility:**

Soluble



## Section 10 - Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions
<b>Materials to be Avoided:</b>	Oxidizing agents
<b>Decomposition Products:</b>	Carbon monoxide, carbon dioxide, nitrogen oxides

## Section 11 - Toxicological Information

<b>Skin Contact:</b>	May be irritating to the skin.
<b>Eye Contact:</b>	Causes eye irritation.
<b>Ingestion:</b>	Causes irritation by ingestion.
<b>Inhalation:</b>	Causes irritation by inhalation.
<b>Sensitization:</b>	Yes
<b>Target Organs:</b>	Liver, kidney, GI system and adrenal cortex

### **Additional toxicological information: Irritant**

May cause sensitization by inhalation or skin contact. Cefotetan is penicillin-like compound therefore penicillin-sensitive individuals should avoid direct exposure to this product.

May cause skin irritation and allergic skin reaction in sensitive individuals. Symptoms may include redness, swelling, rash, and dermatitis.

May cause irritation to eyes on contact; may cause permanent damage to eyes.

Inhalation and ingestion may cause tremors, salivation, stomach pains, nausea, vomiting and diarrhea. Vary toxic if swallowed; target organs include liver, kidneys, GI system, and adrenal cortex.

Acriflavine has shown tumorigenic properties in some studies. The chronic toxicological effects of exposure to this product have not been thoroughly investigated.

Both Cycloheximide and colistin are teratogens that have shown mutagenic and teratogenic effects in many animal studies. May cause harm to unborn child therefore pregnant individuals should avoid using or exposing themselves to this product. The chronic toxicological effects of exposure to this product have not been thoroughly investigated.

**Toxicity Data:** LD/Lc50 values that are relevant for classification

<b>1264-72-8</b>	<b>Colistin Sulfate</b>
Oral	LD50 790 mg/kg (mus)
<b>8063-24-9</b>	<b>Acriflavine Hydrochloride</b>
Oral	LD50 1,048 mg/kg (rat)
<b>26016-99-9</b>	<b>Phosphomycin Disodium</b>
Oral	LD50 4,550 mg/kg (rat)
<b>66-81-9</b>	<b>Cycloheximide</b>
Oral	LD50 2 mg/kg (rat)
<b>74356-00-6</b>	<b>Cefotetan</b>

Data not available



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## Section 12 - Ecological Information

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**Toxicity:** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**General Information:** No data available

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## Section 13 - Disposal Considerations

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**Waste Disposal:** Dispose of in accordance with applicable state and federal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. This product is not considered a RCRA hazardous waste.

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## Section 14 - Transport Information

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**DOT (US):** DOT Regulations:  
UN No. UN 2811  
Proper Shipping name: Toxic Solids, Organic, N.O.S. (Cycloheximide), 91%  
Packing Group: I  
Label: 6.1  
Remarks: This product can be transported in accordance with "Excepted Quantity" packages. This package conforms to 49 CFR 173.4. The Hazard Class, Identification number, and Packaging Group listed above is for informational purposes only.

**IATA:** ICAO/IATA Class: 6.1  
Un No: UN 2811  
Label: 6.1  
Packing Group: I  
Proper Shipping Name: Toxic Solid, Organic, N.O.S. (Cycloheximide)



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## Section 15 - Regulations

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### EU Regulations, Hazard Symbol(s):

Cycloheximide: T (Toxic)  
Acriflavine Hydrochloride: Xi (Irritant)  
Colistin Sulfate: Xi (Irritant)  
Phosphomycin Disodium: Xi (Irritant)

### Risk Phrases:

R 28, Toxic if swallowed.  
R 61, May cause harm to the unborn child.  
R 68, Possible risk of irreversible effects.  
R 36, 37, 38, Irritating to eyes, skin, and respiratory system.

### Safety Phrases:

S 20, When using do not eat or drink.  
S 36, 37, Wear suitable protective clothing and gloves.  
S 45, In case of accident or if you feel unwell, seek medical advice immediately.  
S 57, use appropriate container to avoid environmental contamination.

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## Section 16 - Other Information

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This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. These suggestions should not be confused with state, municipal or insurance requirements, and constitute No Warranty. Dalynn Biologicals Inc. or FoodChek Systems Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

