

Material Safety Data Sheet.

1. IDENTIFICATION

Product Identifier: POLYMYXIN B SULFATE

Other Means of Identification:

Chemical Name: Polymyxin B Sulfate

Synonyms: N/A

Molecular formula: $C_{56}H_{100}N_{16}O_{17}S$

Chemical Family: Antimicrobial drug

CAS Number: 1405-20-5

EINECS Number: 215-774-7

Recommended Use: Active Pharmaceutical Ingredient

Initial Supplier Identifier: Gurvey & Berry Co. Inc.
310 Judson Street, Unit #15
Toronto, ON, Canada, M8Z 5T6
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Emergency Telephone number: Canutec +1 (613)-966-6666

2. HAZARD IDENTIFICATION

GHS Classification in accordance with Hazardous Products Regulations (HPR) OR/2015-17)

Acute toxicity, Oral (Category 4) H302

GHS Label elements, including precautionary statements



Pictogram

GHS07

Signal word WARNING!

Hazard statement(s)

H302 Harmful if swallowed.

Precautionary statement(s):

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P301+P312 IF SWALLOWED: Call a poison center or doctor if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container to an approved waste disposal plant.

Precautionary statement(s)

Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C₅₅H₉₆N₁₆O₁₃·2H₂SO₄

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Polymyxin B Sulfate	1405-20-5	100%	N/A	N/A

Notes:

4. FIRST-AID MEASURES**First aid measures by route of exposure:**

General: Move out of dangerous area. Remove any clothing contaminated by the product.

Consult a physician and show this safety data sheet.

After Inhalation: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical aid.

After Skin Contact: Immediately flush skin with running water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical aid.

After Eye Contact: Immediately flush open eyes with running water for at least 15 minutes. Obtain medical aid.

After Ingestion: Do NOT induce vomiting without medical advice. Rinse mouth with water. Never administer anything by mouth to an unconscious person. Obtain medical aid immediately.

Most Important Symptoms and Effects, Acute and Delayed:

Inhalation: Dust in the air may cause irritation of the lungs and respiratory system.

Skin Contact: Skin contact may result in irritation. Entry into the blood stream, for example through cuts or lesions, may produce systemic injury with harmful effects.

Eye Contact: May cause mechanical irritation.

Ingestion: Irritation of mucous membranes in the mouth and gastrointestinal tract may occur. Vomiting and diarrhea may also occur.

Medical Conditions Aggravated By Exposure:

May aggravate kidney problems, nerve problems and gastrointestinal problems.

Immediate Medical Attention and Special Treatment N/A

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use water, dry chemical, carbon dioxide, or chemical foam.

Unsuitable Extinguishing Media: N/A

Special Hazards Arising from the Product: Carbon oxides, Nitrogen oxides, Sulfur oxides.

Special Protective Equipment and Precautions for Fire-Fighters:

As in any fire, wear a NIOSH-approved or equivalent, pressure-demand, self-contained breathing apparatus, and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Further information: N/A

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Wear protective equipment and keep unprotected personnel away. Ensure adequate ventilation. Remove all sources of ignition. Avoid breathing dust. Prevent further leak or spill if safe to do so. For personal protective equipment, please refer to section 8.

Methods and materials for containment and cleaning up

Small spill

Prevent further spillage if safe to do so. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in designated, labeled, closed waste containers for disposal.

Large spill.

Use a shovel to put the solid in a convenient waste disposal container serving precautions in the Protective Equipment section. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Dispose the waste container of in according to local and regional authority requirement.

Avoid generation of dusts.

Environmental precautions

Do not let product enter untreated drains.

Reference to other sections

See section 1 for emergency contact

See section 8 for information on appropriate personal protective equipment.

See section 13 for disposal

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid inhalation. Avoid contact with skin and eyes. Do not ingest. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from heat.

Conditions for Safe Storage:

Store in a tightly closed container when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances.

Keep away from sources of heat or ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
Polymyxin B Sulfate	N/A	N/A	N/A	N/A

Appropriate Engineering Controls:

Good general ventilation. Local exhaust ventilation is recommended. Eyewash station and safety shower required.

Personal Protection Measures (e.g. personal protective equipment):

Eye/face 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:

Handle with gloves. Gloves must be inspected prior use. Full suit protective clothing, boots, gloves, goggles.

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).

Avoid contact with skin, eyes, and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

Control of environmental exposure N/A

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form:	Solid, Powder
Color:	White – off white
Molecular Weight:	1385.61g/mol
Odor:	Odorless
Odor Threshold:	N/A
pH(0.5%)	5.0-7.5
Melting Point/freezing point:	N/A
Initial boiling point/boiling range:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability (solid; gas):	N/A
Upper flammability or explosive limits:	N/A
Lower flammability or explosive limits:	N/A
Vapor Pressure (mmHg):	N/A
Vapor Density (air=1):	N/A
Relative Density:	N/A
Solubility in Water:	Soluble
Solubility in Other Agents:	N/A
Partition coefficient (n-octanol/water)	N/A
Autoignition	N/A
Decomposition	N/A
Viscosity	N/A
Explosive properties	N/A
Oxidizing properties	N/A
Other information:	

10. STABILITY AND REACTIVITY

Reactivity:	Not available.
Chemical stability:	Stable under recommended temperatures and pressures.
Possibility of hazardous reactions:	Not available.
Conditions to avoid:	Dust generation. Heat. Strong oxidizing agents.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides, Nitrogen oxides, Sulfur oxides.
Other decomposition products	N/A
In the event of fire:	See section 5

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation	Yes
Skin contact	Yes
Eye contact	Yes
Ingestion	Yes

Acute Toxicity LD₅₀:

LD50 Oral - Mouse - 790 mg/kg

Skin corrosion/irritation: N/A

Serious Eye Damage/irritation: N/A

Respiratory and/or Skin

Sensitization: N/A

Aspiration Toxicity: N/A

STOT (Specific Target Organ Toxicity)

Single Exposure: N/A

STOT (Specific Target Organ Toxicity)

Repeated Exposure: N/A

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.

Reproductive Toxicity: N/A

Germ Cell Mutagenicity: N/A

Interactive Effects N/A

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Other adverse effects: Not available.

13. DISPOSAL CONSIDERATIONS

Wastes of Residues: Waste must be disposed of in accordance with federal, provincial, and local regulation

Contaminated Packaging: Do not reuse containers. Dispose of as unused product.

14. TRANSPORT INFORMATION

Not regulated as hazardous material or dangerous goods.

15. REGULATORY INFORMATION

CANADA

DSL/NDSL: Listed on the DSL

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

This information is based upon knowledge currently available. More detailed information on the physical and chemical properties can be requested from the supplier. To the best of our knowledge, the information contained herein is accurate and complete. However, this should not be construed to imply any warranty or guarantee. Gurvey & Berry Co. Inc. shall not be held liable for any damage resulting from handling or from contact with the above chemical.

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This document will only be updated as needed.

N/A = not available.

N/D = not determined.