

Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Neomycin Sulfate & Polymyxin B Sulfates & Gramicidin Ophthalmic Solution**

Product Code

- AB03409; Core No. 034; NDC 24208-0790-62

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Finished Pharmaceutical Product; Indicated for the topical treatment of superficial infections of the external eye and its adnexa caused by susceptible bacteria.

Restrictions on use

- Refer to the product insert and/or prescribing information for restrictions on use and contraindications.

Details of the supplier of the safety data sheet

Manufacturer

- Bausch & Lomb
1400 North Goodman Street
Rochester, NY 14609
United States
bausch.com

Telephone (General) • 1-800-553-5340

Emergency telephone number

Manufacturer

- 1-800-535-5053 - Infotrac

This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant to consumer use of the product.

Section 2: Hazard Identification

UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Classification of the substance or mixture

UN GHS

- Skin Sensitization 1B

Label elements

UN GHS

WARNING



Hazard statements • May cause an allergic skin reaction

Precautionary statements

Prevention ● Wash thoroughly after handling.

Response ● IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

Storage/Disposal ● Keep tightly closed. Store at room temperature 15-25°C (59-77°F), to maintain product integrity. Use before date marked on carton and/or container.
Store protected from light and heat.

Other hazards

UN GHS

● No data available

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Mixtures

Composition			
Chemical Name	Identifiers	%	Classifications According to Regulation/Directive
Dehydrated Alcohol	CAS:64-17-5 EINECS:200-578-6	< 1%	UN GHS: Skin Irrit. 2; Eye Irrit. 2A; Muta. 1B; Repr. 1B
Gramicidin	CAS:1405-97-6 EINECS:215-790-4	< 0.01%	UN GHS: NDA
Neomycin, sulfate (salt)	CAS:1405-10-3 EINECS:215-773-1	< 1%	UN GHS: Skin Irrit. 2; Eye Irrit. 2A
Poloxamer 188	CAS:9003-11-6	< 1%	UN GHS: NDA
Polymyxin B sulfate	CAS:1405-20-5 EINECS:215-774-7	< 1%	UN GHS: NDA
Propylene glycol	CAS:57-55-6 EINECS:200-338-0	< 0.1%	UN GHS: Skin Irrit. 3; Eye Irrit. 2B
Sodium chloride	CAS:7647-14-5 EINECS:231-598-3	0.5%	UN GHS: Skin Irrit. 2; Eye Irrit. 2A; Acute Tox. Oral 5
Thimerosal	CAS:54-64-8 EINECS:200-210-4	0.001%	UN GHS: Skin Irrit. 2; Eye Irrit. 2A
Water	CAS:7732-18-5 EINECS:231-791-2	Balance	UN GHS: Not Classified

Hydrochloric Acid (CAS:7647-01-0, EINECS:231-595-7) and/or Ammonium Hydroxide (CAS# 1336-21-6, EINECS: 215-647-6) may be added to adjust the pH.

The exact percentage of composition has been withheld as a trade secret.

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- No inhalation exposure expected with this formulation under normal conditions of use.
If signs/symptoms develop, get medical attention.

Skin

- Flush with fresh water if contact with skin or eyes. If skin irritation occurs: Get medical

advice/attention.

Eye

- For accidental and non-therapeutic applications, flush eyes with copious amounts of water for at least 15 minutes. Get medical attention. If eye irritation persists: Get medical advice/attention.

Ingestion

- No specific treatment is necessary since this material is not likely to be hazardous by ingestion. If large quantities are accidentally ingested (greater than a tablespoon), get medical attention immediately.

Most important symptoms and effects, both acute and delayed

- No data available

Indication of any immediate medical attention and special treatment needed

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
LARGE FIRE: Water spray, fog or regular foam.

Unsuitable Extinguishing Media • No data available

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • None known.

Hazardous Combustion Products • None known.

Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions • No special controls or personal protection required under conditions of intended use. In the event of bulk spills, wear suitable protective eyewear, clothing, protective boots and protective gloves. Evacuate immediate area. Ensure adequate ventilation. Refer to Section 8.

Emergency Procedures • Keep unauthorized personnel away. Ventilate closed spaces before entering. Stop leak if you can do it without risk.

Environmental precautions

- Prevent spilled material from entering storm sewers or drains, waterways, and contact with soil.

Methods and material for containment and cleaning up

Containment/Clean-up Measures • Contain spilled product. For small spills, add suitable absorbent material. Scoop up and place in an appropriate liquid-tight container equipped with a tight cover for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate, liquid-tight container equipped with a tight cover for disposal. Dispose of in accordance with Section 13.

Section 7 - Handling and Storage

Precautions for safe handling

Handling • No special handling is required. Refer to Section 8. Use only in accordance with product literature. Use only in accordance with product literature.

Conditions for safe storage, including any incompatibilities

- Storage**
- Keep tightly closed. Store at room temperature 15-25°C (59-77°F), to maintain product integrity. Use before date marked on carton and/or container. Protect from light.
- Incompatible Materials or Ignition Sources**
- None specified.

Section 8 - Exposure Controls/Personal Protection

Control parameters

- Exposure Limits/Guidelines**
- Refer to the occupational exposure limits / guidelines for the individual product components.

Exposure controls

- Engineering Measures/Controls**
- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

- Respiratory**
- In the event of a bulk spill, and where risk assessment shows that air-purifying respirators are appropriate, a NIOSH (US) or CEN (EU) -certified air-purifying respirator equipped with HEPA cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, when adequate oxygen is present and as a backup to engineering controls. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release or any other circumstances where air purifying respirators may not provide adequate protection.
- Eye/Face**
- Wear protective eyewear (goggles, face shield, or safety glasses) when handling bulk product before closed in final packaging. In the event of a spill, appropriate eye protection should be worn.
- Hands**
- No special personal protection required under conditions of intended use. In the event of a bulk spill, wear rubber or nitrile gloves.
- Skin/Body**
- No special personal protection required under conditions of intended use. In the event of a bulk spill, wear appropriate protective clothing.
- General Industrial Hygiene Considerations**
- Wash thoroughly after handling.
- Environmental Exposure Controls**
- No data available

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Color	Not relevant
Odor	Not relevant	Odor Threshold	Not relevant
General Properties			
Boiling Point	No data available	Melting Point	Not relevant
Decomposition Temperature	Not relevant	pH	4.7 to 6
Specific Gravity/Relative Density	= 1.0045	Density	Not relevant
Water Solubility	Soluble	Viscosity	No data available
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant

Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- No data available

Conditions to avoid

- Extreme heat or cold. Do not freeze. Protect from light and heat.

Incompatible materials

- No data available

Hazardous decomposition products

- No data available

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Thimerosal (0.001%)	54-64-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 75 mg/kg
Gramicidin (< 0.01%)	1405-97-6	Acute Toxicity: Intravenous-Mouse LD50 • 1500 µg/kg
Polymyxin B sulfate (< 1%)	1405-20-5	Acute Toxicity: Ingestion/Oral-Mouse LD50 • 790 mg/kg
Neomycin, sulfate (salt) (< 1%)	1405-10-3	Acute Toxicity: Ingestion/Oral-Mouse LD50 • >8 g/kg

GHS Properties	Classification
Acute toxicity	UN GHS • Classification criteria not met
Aspiration Hazard	UN GHS • Classification criteria not met
Carcinogenicity	UN GHS • Classification criteria not met
Germ Cell Mutagenicity	UN GHS • Classification criteria not met
Skin corrosion/Irritation	UN GHS • Classification criteria not met
Skin sensitization	UN GHS • Skin Sensitizer 1B
STOT-RE	UN GHS • Classification criteria not met
STOT-SE	UN GHS • Classification criteria not met
Toxicity for Reproduction	UN GHS • Classification criteria not met

Respiratory sensitization	UN GHS • Classification criteria not met
Serious eye damage/Irritation	UN GHS • Classification criteria not met

Potential Health Effects

Inhalation

- Acute (Immediate)**
 - Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)**
 - No data available.

Skin

- Acute (Immediate)**
 - Not expected to cause skin irritation.
- Chronic (Delayed)**
 - Repeated and prolonged exposure may cause irritation.

Eye

- Acute (Immediate)**
 - May cause irritation.
- Chronic (Delayed)**
 - Refer to the product insert and/or product prescribing information for comprehensive information regarding adverse reactions and other important symptoms and effects. Under normal conditions of use, no health effects are expected.

Ingestion

- Acute (Immediate)**
 - Not expected to be an exposure route. However, may cause gastric and intestinal irritation if ingested.
- Chronic (Delayed)**
 - No data available.

Carcinogenic Effects

- Long-term studies in animals to evaluate carcinogenic or mutagenic potential have not been conducted with polymyxin B sulfate or gramicidin. Treatment of cultured lymphocytes in vitro with neomycin increased the frequency of chromosome aberrations at the highest concentration (80 mcg/mL) tested. However, the effects of neomycin on carcinogenesis and mutagenesis in humans are unknown.

Carcinogenic Effects			
	CAS	IARC	NTP
Dehydrated Alcohol	64-17-5	Group 1-Carcinogenic	Evidence of Carcinogenicity

Reproductive Effects

- Polymyxin B has been reported to impair the motility of equine sperm, but its effects on male or female fertility are unknown. Pregnancy Category C. Adequate animal reproductive studies have not been conducted with neomycin, polymyxin B or gramicidin. It is also not known whether this product can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity.

Section 12 - Ecological Information

Toxicity

- This material has not been tested for environmental effects.

Persistence and degradability

- No data available.

Bioaccumulative potential

- No data available

Mobility in Soil

- No data available

Other adverse effects

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

Special precautions for user

- No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- No data available

Inventory				
Component	CAS	Canada DSL	EU EINECS	TSCA
Propylene glycol	57-55-6	Yes	Yes	Yes
Dehydrated Alcohol	64-17-5	Yes	Yes	Yes
Gramicidin	1405-97-6	No	Yes	No
Thimerosal	54-64-8	Yes	Yes	Yes
Neomycin, sulfate (salt)	1405-10-3	Yes	Yes	Yes
Poloxamer 188	9003-11-6	Yes	No	Yes
Polymyxin B sulfate	1405-20-5	Yes	Yes	No
Sodium chloride	7647-14-5	Yes	Yes	Yes
Water	7732-18-5	Yes	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	D2B
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Uncontrolled product according to WHMIS classification criteria
• Dehydrated Alcohol	64-17-5	B2, D2B

• Sodium chloride	7647-14-5	Uncontrolled product according to WHMIS classification criteria
• Water	7732-18-5	Uncontrolled product according to WHMIS classification criteria
• Poloxamer 188	9003-11-6	Not Listed

Canada - WHMIS - Ingredient Disclosure List

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	0.1 %
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	1 %
• Dehydrated Alcohol	64-17-5	0.1 %
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

Europe**Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	F; R11
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	F R:11 S:(2)-7-16
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	S:(2)-7-16
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

United States

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	carcinogen, initial date 4/29/11 (in alcoholic beverages)
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	developmental toxicity, initial date 10/1/92 (internal use)
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	developmental toxicity, initial date 10/1/87 (in alcoholic beverages)
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Gramicidin	1405-97-6	Not Listed
• Neomycin, sulfate (salt)	1405-10-3	Not Listed
• Thimerosal	54-64-8	Not Listed
• Polymyxin B sulfate	1405-20-5	Not Listed
• Propylene glycol	57-55-6	Not Listed
• Dehydrated Alcohol	64-17-5	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Water	7732-18-5	Not Listed
• Poloxamer 188	9003-11-6	Not Listed

Section 16 - Other Information

Last Revision Date

- 23/April/2015

Preparation Date

- 07/September/1994

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