

# BAUSCH & LOMB

Pharmaceutical Division

## MATERIAL SAFETY DATA SHEET

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Core No. 041

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Neomycin and Polymyxin B Sulfates and Dexamethasone Ophthalmic Suspension USP  
**Generic Name:** Same  
**NDC No.** 24208-830-60 (5 ml)

**Legal Category:** Prescription only medicine, filled inside plastic bottle suitable for dispensing, and overpacked inside a cardboard carton.

**Drug Composition:** Antibiotics/Glucocorticoid

BAUSCH & LOMB PHARMACEUTICALS, INC.  
8500 Hidden River Parkway  
Tampa, FL 33637

Information: (800) 323-0000 (M-F) 8am-5pm EST  
Emergency: (800) 227-1427 24 hrs

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Description	CAS #	TLV (mg/m <sup>3</sup> )	PEL(mg/m <sup>3</sup> )	% Content
Dexamethasone	50-02-2	NE	NE	<1
Neomycin Sulfate	1405-10-3	NE	NE	<1
Polymyxin B Sulfate	1405-20-5	NE	NE	<1
Purified Water	7732-18-5	NE	NE	qs

Ingredients <1% - Sodium Chloride, Hydroxypropyl Methylcellulose 2910, Polysorbate 20, Benzalkonium Chloride

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### 3. HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

Plastic bottle in a cardboard box. White aqueous suspension.

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#### POTENTIAL HEALTH HAZARDS

**Carcinogenicity:** (NTP) No (IARC) No (OSHA) No

**Eye:** May cause irritation or burning sensation on installation. Can cause hypersensitivity (anaphylactic) in some individuals. The most frequent adverse reactions are localized hypersensitivity with itching, swelling of the conjunctiva and eyelid, and diffused redness of the eye (conjunctival erythema). It may be manifest as a failure to heal. It has been shown, though not in humans, that through large doses or prolonged topical administration, glucocorticoids may be systemically adsorbed by pregnant mothers and produce fetal abnormalities. Systemically administered corticosteroids are secreted into breast milk in quantities not likely to have a deleterious effect on the infant. Systemic toxicity reactions include reversible hypothalamic-pituitary-adrenal axis gland suppression, manifestations of Cushing's syndrome, intercranial hypertension, hyperglycemia, and glycosuria. Neomycin sulfate causes cutaneous sensitization. A precise incidence of allergic reactions (primarily skin rash) due to topical neomycin is not known.

**Skin:** May cause irritation and hypersensitivity in some individuals. Neomycin sulfate causes cutaneous sensitization. The most frequent adverse reactions are localized hypersensitivity with itching, swelling and diffused redness of the skin (erythema).

**Ingestion:** May cause irritation and hypersensitivity in some individuals. Large doses may induce vomiting, diarrhea, adrenal gland suppression, Cushing's syndrome, hyper-glycemia, and possibly birth defects in pregnant mothers.

**Inhalation:** May cause irritation and hypersensitivity in some individuals.

**Chronic Effects:** May cause irritation and hypersensitivity. As with other antibiotic preparations, prolonged use may result in the overgrowth of non-susceptible organisms, including fungi. Appropriate measures should be taken if this occurs. Prolonged use may result in glaucoma, with damage to the optic nerve, and other visual effects. Response to secondary infections may be impaired. In purulent infections of the eye, steroids may mask infection or enhance existing infection.

**Target Organs:** Eyes, skin, digestive tract, kidney and brain.

**Medical Conditions Aggravated by Long Term Exposure:** Anaphylactic cross-reactions may occur for corticosteroids and antibiotics including kanamycin, paromomycin, streptomycin and possibly gentamicin. This medication is contraindicated for patients with herpes simplex, vaccinia and varicella infections. As with other anti-microbial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Preexisting conjunctival or systemic fungal infections may be aggravated. Appropriate measures should be taken if this occurs.

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#### 4. FIRST AID MEASURES

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**Eyes:** Rinse immediately with copious amounts of water for at least 20 minutes. Contact a physician.

**Skin:** Remove all contaminated clothing and wash skin with copious amounts of water for at least 20 minutes. Contact physician if skin becomes irritated.

**Ingestion:** Wash out mouth and drink plenty of water and bland fluids. Do not give anything to an unconscious person. Contact physician.

**Inhalation:** Remove person to fresh air, and if breathing stops, use artificial respiration. Contact physician.

**Note to Physicians:** Corticosteroids have been known to appear in the milk of nursing mothers when orally administered. Additional details are available on the package insert or in the Physicians Desk Reference.

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#### 5. FIRE FIGHTING MEASURES

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**Flammable Properties:** Flash point: NE Method: NE

**Hazardous Products:** Emits toxic fumes.

**Extinguishing Media:** Dry chemical, carbon dioxide, halon, water fog and foam for surrounding materials. Water spray will froth if sprayed into the burning material.

**Fire Fighting Instructions:** Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. Do not spray water into the burning material.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Large/Small Spills:** Use personal protective equipment. Contain the spill to prevent drainage into sewers, drains or streams. Use absorbent material to solidify the spill. Shovel or scoop up solidified waste. Dispose of material according to Federal, State and Local regulations.

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## 7. HANDLING AND STORAGE

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**Handling:** Avoid contact with product and use caution to prevent puncturing containers. No special protective equipment or procedures are required in the clinical or home environment.

**Storage:** Store product upright in original containers with the cap tightly closed at a controlled room temperature 15<sup>0</sup>-30<sup>0</sup> C (59<sup>0</sup>- 86<sup>0</sup> F). **KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN.**

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## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

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**Engineering Controls:** In the manufacturing plant, provide adequate ventilation for the raw material handling and compounding process which will maintain the dust and vapor levels below the TLV, STEL, and PEL values for the ingredients. Ventilation fans should be explosion proof. Use adequate personal protective equipment e.g. NIOSH-approved respirators, goggles or safety glasses, gloves and protective clothing. Ensure training in the handling of chemical materials and use current Material Safety Data Sheets.

**Eye Protection:** (29 CFR 1910.133) Recommend goggles or chemical safety glasses.

**Skin Protection:** Thick impermeable gloves and protective clothing.

**Respiratory Protection:** (29 CFR 1910.134) NIOSH approved respirator, with organic vapor, acid gas and HEPA filter recommended for handling raw materials.

**Warning:** **Do not use air purifying respirators in oxygen depleted environments.** No respiratory protection is required in the clinical or home environment.

**Other:** None

**Ventilation:** Recommended

**Contaminated Equipment:** Wash contaminated clothing separately. Wash

equipment with soap and water. Release rinse water into an approved wastewater system or according to Federal, State and Local regulations.

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## 9. CHEMICAL & PHYSICAL PROPERTIES

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Appearance & Odor:	White aqueous suspension.		
Boiling Point:	NE	Evaporation Rate:	NE
Specific Gravity:	NE	Vapor Density:	NE
Vapor Pressure:	NE	Viscosity:	NE
Water Solubility:	Miscible	Percent Volatile by Volume:	<1

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## 10. STABILITY AND REACTIVITY

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**Chemical Stability:** Stable

**Conditions to avoid:** Extreme heat or cold.

**Incompatibility:** This product has the incompatibilities of water e.g. strong acids, bases, alkali metals, alkali hydrides and silver preparations.

**Hazardous Decomposition Products:** Emits toxic fumes.

**Hazardous Polymerization:** Should not occur.

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## 11. TOXICOLOGY INFORMATION

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Summary of Risks: Toxicological information refers to raw materials product. Concentrations and toxicological effects are substantially reduced in the product. For more detailed information see MSDS on chemical material.

CAS #

50-02-2

### **Dexamethasone Base**

May cause irritation to eyes, skin and respiratory tract. May also cause pain, redness, and pus containing blisters. Prolonged or repeated contact may cause hypersensitivity (anaphylactic) in some individuals. May cause allergic reaction if inhaled, ingested or in contact with the skin. Adverse reactions include suppression of adrenal gland secretion, Cushing's syndrome, water retention, electrolyte imbalance and hyperglycemia. Studies in animals indicate that topical adrenocorticoids, when used in large amounts, can be systemically absorbed and may cause fetal abnormalities. Human pregnancy studies have not been done. IP-rat LD50 54 mg/kg, SC-rat LD50 14 mg/kg.

1404-04-2

**Neomycin Sulfate**

Prolonged or repeated contact can cause hypersensitivity (anaphylactic) in some individuals. People sensitive to one aminoglycoside antibiotic may also be sensitive to neomycin sulfate. High level overdosage is toxic to kidneys (nephrotoxicity) and may cause hearing difficulties (ototoxicity) and diminished balance. Oral-rat LD<sub>50</sub> 2750 mg/kg.

1404-26-8

**Polymyxin B Sulfate**

May cause irritation to skin, mucous membranes and respiratory tract. Prolonged and repeated contact can produce hypersensitivity (anaphylactic) in some individuals. Overexposure may produce dizziness, diminished muscular coordination, kidney damage (nephrotoxicity) and sensory disturbances. This material is not readily absorbed into the gut and does not present a toxicological hazard. IV-mouse LD<sub>50</sub> 5.4mg/kg, IP-mouse 20.5 mg/kg, oral-mouse 790 mg/kg, SC-mouse LD<sub>50</sub> 59.5 mg/kg.

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**12. ECOLOGICAL INFORMATION**

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**Chemical Fate Information:** Product administered to patients presents a negligible impact on the environment.

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**13. DISPOSAL INFORMATION**

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**Dispose of material according to Federal, State, and Local regulations.** The method typically used is incineration.

**EPA Designations:** RCRA Hazardous Waste: Not Listed

**SARA Title III:** Not Listed

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**14. TRANSPORTATION INFORMATION**

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**Transportation Data:** Not classified as hazardous by DOT regulations.

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**15. REGULATORY INFORMATION**

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**DOT Designations:** Not classified as hazardous by DOT regulations.

**EPA Designations:** RCRA Hazardous Waste  
(40 CFR 261.33) Not Listed

BAUSCH & LOMB Pharmaceuticals Division  
MSDS: Neomycin and Polymyxin B Sulfates and Dexamethasone Ophthalmic  
Suspension USP

**FDA Designations:** Prescription only medication.  
NDC No. 24208-830-60 (5 ml)

**OSHA Designations:** (29 CFR 1910.1000, Table Z)  
Not Listed

**SARA Title III:** Not listed under Section 313 of Toxic Release Reporting.

**CALIFORNIA PROPOSITION 65:** Not Listed

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**16. OTHER INFORMATION**

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None

The information contained herein is furnished without warranty of any kind. The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

NE- Not Established

< - Less Than

> - Greater Than