

BAUSCH & LOMB

Pharmaceutical Division

MATERIAL SAFETY DATA SHEET

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Core No. 156

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MURO 128[®] 5% (OTC)
Generic Name: Sodium Chloride Hypertonicity Ophthalmic Solution
NDC No. 24208-277-15 (15 ml)
24208-277-30 (30 ml)

Legal Category: Pharmaceutical preparation, filled inside plastic bottle suitable for dispensing, and overpacked inside a cardboard carton.

Drug Composition: Inorganic salt (Draws water from the cornea)

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 ³)	PEL(mg/m ³)	% Content
Sodium Chloride	7647-14-5	NE	NE	5
Boric Acid	10043-35-3	NE	NE	≥1
Hydroxypropyl methylcellulose	9004-65-3	NE	NE	≥1

Ingredients <1% - Sodium Borate, Propylene Glycol, Methylparaben, Propylparaben

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Plastic bottle in a cardboard box. Colorless to slightly yellow, slightly viscous, aqueous solution.

POTENTIAL HEALTH HAZARDS

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

Eye: May cause irritation, temporary burning sensation and hypersensitivity (anaphylactic) in some individuals.

Skin: May cause irritation and hypersensitivity in some individuals.

Ingestion: May cause irritation and hypersensitivity in some individuals. Ingestion of large quantities can induce gastric disturbances.

Inhalation: May cause irritation and hypersensitivity some individuals.

Chronic Effects: May cause irritation and hyper-sensitivity. Prolonged application can induce changes in vision.

Target Organs: Eyes and digestive tract.

Medical Conditions Aggravated by Long Term Exposure: Hypersensitivity to any of the components of the product.

4. FIRST AID MEASURES

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. Give 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: None

5. FIRE FIGHTING MEASURES

Flammable Properties: Flash point: NE Method: NE

Hazardous Products: Toxic Fumes.

Extinguishing Media: Dry chemical, carbon dioxide, halon, water spray or fog, and foam on surrounding materials.

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.

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

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 15⁰-30⁰ C (59⁰- 86⁰ F). **KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN.**

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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 material 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.

9. CHEMICAL & PHYSICAL PROPERTIES

Appearance & Odor:	Colorless to slightly yellow, slightly viscous solution.		
Boiling Point:	NE	Evaporation Rate:	NE
Specific Gravity:	1.0	Vapor Density:	NE
Vapor Pressure:	NE	Viscosity:	NE
Water Solubility:	Miscible	Percent Volatile by Volume:	<1

10. STABILITY AND REACTIVITY

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.

11. TOXICOLOGY INFORMATION

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

CAS #

10043-35-3

Boric Acid

Inhalation can cause coughing and chest discomfort. Prolonged skin contact can cause burns and sensitization. Ingestion can cause nausea and vomiting. Swallowing large quantities may be fatal and chronic exposure can cause central nervous system stimulation and skin redness or rash. Oral-rat LD₅₀ 2660 mg/kg, Inhalation-rat LC₅₀ >16 mg/L.

9004-65-3

Hydroxypropyl Methcellulose

May cause irritation to the eyes, skin or respiratory tract. Dust exposure to the eyes, skin, respiratory and digestive tract can cause hypersensitivity in some individuals. Intraperitoneal-rat LD₅₀ 5200 mg/kg, intraperitoneal-mouse LD₅₀ 5000 mg/kg.

7647-14-5

Sodium Chloride

May cause irritation to eyes, skin, nerves, respiratory and digestive tract. Eyes and respiratory tract can be irritated by solid or dust and prolonged skin contact can cause irritation. Ingestion of large amounts can cause high blood pressure (hypertension) and congestion of the internal organs (esp. the meninges and brain), cramps, vomiting, prostration, coma and death.

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL INFORMATION

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

14. TRANSPORTATION INFORMATION

Transportation Data: Not classified as hazardous by DOT regulations.

15. REGULATORY INFORMATION

DOT Designations: Not classified as hazardous by DOT regulations.

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

FDA Designations: OTC
NDC No. 24208-277-15 (15 ml)
NDC No. 24208-277-30 (30 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

16. OTHER INFORMATION

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