

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

#167

**IDENTITY**

Epinephrine 0.01% Solution

Note: Blank spaces are not permitted. If any item is not applicable, or no
information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name

Ward's Natural Science

Emergency Telephone Number

800-424-9300 (CHEMTREC)

Address (Number, Street, City, State, and ZIP Code)

5100 W. Henrietta Rd.

Telephone Number for Information

716-359-2502

P.O. Box 92912

Date Prepared

4/8/96

Signature of Preparer


(Kenneth G. Fainis)

Rochester, NY 14692-9012

Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % |
|---|----------|-----------|--------------------------|------|
| L-Adrenalin CAS# 51-43-4 | N/A | N/A | N/A | 0.01 |

Warning May be harmful if swallowed or fatal by injection.**Not for clinical use. For lab use only. Non-sterile solution.****Section III - Physical/Chemical Characteristics**

| | |
|-------------------------|----------------------------|
| Bolling Point | Specific Gravity (H2O = 1) |
| Approx. 100°C | Approx. 1.0 |
| Vapor Pressure (mm Hg) | Melting Point |
| 14mm (water) | Approx. 0°C |
| Vapor Density (AIR = 1) | Evaporation rate |
| 0.7 (water) | (Butyl Acetate) <1 |
| Solubility in Water | |
| Complete | |

Appearance and Odor

Clear, colorless liquid with no odor.

Section IV - Fire and Explosion Hazard Data

| | | | |
|---------------------------|-------------------------|-----|-----|
| Flash Point (Method Used) | Flammable Limits in air | LEL | UEL |
| N/A | % by volume EtOH | - | - |

Extinguishing Media

Water spray; carbon dioxide(CO2); dry chemical(ABC); foam.

Special Firefighting Procedures

N/A

Wear a NIOSH-approved self-contained breathing apparatus and full protective equipment for large spills.

Unusual Fire and Explosion Hazards

Slight when exposed to heat or flame.

Section V - Reactivity Data

| | | |
|-----------|----------|---|
| Stability | Unstable | Conditions to Avoid |
| | | Excessive temperatures or heat, fire and ignition sources.. |
| | Stable | |
| | X | |

Incompatibility (Materials to Avoid)

Strong oxidizers and alkaline materials.

Hazardous Decomposition or Byproducts

None known.

| | | |
|--------------------------|----------------|--|
| Hazardous Polymerization | May Occur | Conditions to Avoid |
| | Will Not Occur | Protect from sunlight and exposure to air. |
| | X | |

Section VI - Health Hazard Data

| | | | |
|--------------------|-------------|-------|------------|
| Route(s) of Entry: | Inhalation? | Skin? | Ingestion? |
| | Yes | Yes | Yes |

Health Hazards (Acute and Chronic)

Orl-rat LD50: 24mg/kg. Scu-rat LD50: 5 mg/kg.

| | | | |
|------------------|------|------------------|-----------------|
| Carcinogenicity: | NTP? | IARC Monographs? | OSHA Regulated? |
| No | No | No | No |

Signs and Symptoms of Exposure

Ingestion: Low toxicity if swallowed

Contact: Avoid contact with skin, eyes, and mucous membranes. Contact with skin may cause allergic reaction or irritation in hypersensitive individuals.

Injection: May be fatal by injection. Injection may cause increase in heartrate, irritability, headache, elevated blood pressure, dialated pupils, and death.

Eyes: May cause irritation on contact.

Medical Conditions

May be aggravated by exposure.

Emergency and First Aid Procedure

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids.

Get medical attention.

Skin: Flush with water.

Ingestion: Do NOT give anything by mouth to an unconscious or very drowsy person. If conscious, have victim drink several glasses of water, induce vomiting. Call physician or Poison Control Center.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Wear PPE: goggles, gloves and apron. Remove all sources of ignition, provide adequate ventilation. Absorb spill in vermiculite, paper towelling, or other absorbent material. Place in suitable container for incineration. Wash spill area with soap and water.

Waste Disposal Method

Dilute with copiou amounts of water and flush to sanitary sewer. Disposal may be subject to Federal, State and Local regulations.

Other Precautions: Read label caarefully before use. Do not wear contact lenses when working with chemicals.

For lab use only. Not for drug, food, or cosmetic use. Keep out of reach of children.

Keep away from heat, sparks, and flames. Keep container tightly closed when not in use. Remove and wash contaminated clothing.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

None needed

| | | |
|-------------|----------------------|---------|
| Ventilation | Local Exhaust | Special |
| | None needed | No |
| | Mechanical (General) | Other |
| | None needed | No |

Protective Gloves

Rubber (butyl/nitrile) Gloves

Other Protective Clothing or Equipment

Chemical safety goggles, lab coat, apron, eye wash station in close proximity, within 15 sec. of work station.

Work/Hygenic Practices

Wear protective equipment. Wash hands with soap and water following the handling of this material.

Use under direct supervision of a qualified individual knowledgeable in all aspects of laboratory safety. This product is intended for lab use only. Not for drug, food, or cosmetic use.

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OR MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM SUCH USE. USERS SHOULD MAKE THEIR OWN INVESTIGATION TO DETERMINE SUITABILITY OF THIS INFORMATION TO THEIR PARTICULAR PURPOSES

Epi #2